This is not a book

by Tom Abba & Baldur Bjarnason

Introduction

The blindness of mandated prophecy

Take the case of Alexander the Great. He is once again about to make a far-reaching decision, and has been told of a woman who can predict the future with total accuracy. He summons this woman, to teach him her art. She tells him that he must light a big fire and read the future in the smoke from the fire, as from a book. But she gives the warrior one warning. While reading the smoke, he must on no account think of the left eye of a crocodile. The right eye if he must, but never the left.

Alexander gave up on knowing the future. Why? Because as soon as you have been instructed not to think of something, you can think of nothing else. The prohibition becomes an obligation. It is in fact impossible not to think of that crocodile's left eye. The beast's eye has taken over your memory, and your mind. *(This is not the End of the Book, Jean-Claude Carriére: 18)*

To see the present clearly, you need a view of the now and the past that isn't obstructed by your hopes, speculations, and dreams about the future. Seeing the now *requires* the beast's left eye to be firmly in your mind.

This isn't about the future of publishing. We haven't set out to examine how we've arrived at this point, nor does we propose any grand solutions for the next few decades. It isn't about the challenges for the industry, or the shift to digital.

This is about now.

This is a collection of provocations masquerading as arguments. Written by a pair of academics, who are now more usefully engaged in making work that explores what the book might become in a variety of media and forms. Each section is intended to be read alone, and the whole collection to be browsed, dropped in and out of and bookmarked (digitally or otherwise), commented upon and improved by time.

This site is for writers, artists, designers and programmers. It is for anyone working with books, with digital technologies, with theatre and in film. It is for transmedia specialists, experience architects and everyone else with a brilliant job title. It's about how we make work.

It is also a manifesto in flux. It is a set of lines in the sand that will be erased by the next tide and redrawn the following morning because the world changes everything and you have to believe at least two things at once.

We thought it was useful to write it though, and have it read. Collectively or alone. Bookmarked or otherwise.

Read it, distribute it, send it on and excerpt chapters or statements, quotes or ideas.

The world is in flux, and so is writing. As creators in a networked world, we can sit by the shore and wait for a defining text, watching the tide for each sighting of a sail on the horizon, or we can write, and offer ideas, and some of them will find a home.

The stories we tell in digital

Let's put aside, for the moment, any and all media that you could dub as being 'in transition'. Let's not talk about Netflix and their like and how they affect TV and cinema. Let's not talk about how the web has disrupted newspapers. Let's not talk about ebooks.

Instead let's talk about the stories we tell in digital—the *new* ones. The ones we weren't telling before or have been transformed in digital to such an extent as to be unrecognisable.

I'm talking about the storeis that have changed your lives.

First the simple and obvious ones: the story of your sister's new child, played out on Facebook, all of your relatives—no matter where they are—coming together to add their their own layer to the story; the stories of other people coming out that gave you strength; the story of your aunt handling her illness and the support everybody is giving her.

Social media is *the* dominant form of storytelling of the 21st century. It's the one that is the most commonly practiced—near universal among those who have access to the internet. It envelops and assimilates every other story, even the ones that refuse to go digital. It is the primary narrative for the modern experience and the meta-

narrative for everything else—mediating and commenting on all other media, offline or online.

It is the stories we tell in digital.

We can avoid it if we want. Easy if we stick to older media with long-standing conventions. The other media may have to operate in a changed context but they aren't disappearing in any real way. This isn't about those other media. People love them. They'll be fine. You can disrupt companies but the only thing a form of art needs is interest. Disrupting a medium is rare. This is about telling better stories in digital. To do so we need to respect it as a medium, love the stories we are already telling, discover the ones that are particularly good, and—finally—we need to discover the stories we aren't telling. What stories are missing from digital? What do we need more of? What can we do better?

The stories we miss in digital

The first mistake to avoid is to expect digital media to be something it isn't. It isn't a book (although it can be used as a context for book reading). It isn't TV (again, context). It's got its own weirdnesses and features. It can be ludic—both games with stories and stories with game-like features—but it doesn't have to be. It can be non-linear and exploratory, but it doesn't have to be (Twitter doesn't become print just because it is almost entirely linear). It can build on real life ("see the pictures of my baby's poo face") or it can be fiction (games, Wattpad, fan-fiction). Its flexibility is pretty impressive. What it does lack is age and maturity. Its body of work is dwarfed by that of other media.

What digital media lacks is more stories.

Your stories. More of them. Lot's of them. It doesn't matter if you're planning an indie game, a piece of Black Widow/Spider-Woman slash fiction, original short stories on Wattpad, or your occasional experimentation with web-based hypertext. We want more of it and we want you to make more of it. That's what this site is for. If you come away from this with even one new idea, one new twist on an exciting project, or one new tactic to use in your own creative work—then we will have succeed-

ed. Read. Take from it what you want. Make things. Tell more stories.

The stories we miss online are your stories.

How did we get here?

Any interested party possessing a passing familiarity to the history of media has heard this story a thousand times before. It's become standard in almost any book or article on the history of cinema, usually going something like this: *'Early cinema didn't really exploit the features of the medium. The first films were just recorded plays, shot on a stage, and acted out. It was Eisenstein, Vertov and his wife, and Kuleshov who changed that when they invented montage.'*

There's more to the emergence of film than that summary, just like there's more to the book to ebook 'transition' than swapping out one medium for another, or adding another format to the hardcover - trade paperback - mass market paperback lineup.

First of all, much to everyone's surprise, plays didn't disappear with the advent of film, nor did film once TV arrived, and TV's definitely still around despite the now several-decade-long existence of the web, and more ubiquitous digital media.

Second of all film - as a medium and a context, remains informed by the play - as a medium and context. Film theatres kept many of the trappings of play theatres

for decades - curtains, ushers, gilt mouldings - before they became the more fast-food-style, commercially driven outlets that they are today.

Actors frequently switch between cinematic work and theatre, their art form isn't bound to one or the other, despite the need to adjust some facets of it for each medium. There are more, but sorting them out would turn this into a text exploring the form of film, not a text on text.

The history of these things is difficult to crack apart and lovingly shove into neat little boxes. As with film, digital text draws from its predecessors, borrows a lot of its trappings and languages, although, as has become clear, doesn't replace it. Newer forms of media rarely disrupt their predecessors—at least, not in the Clayton Christensen sense. What happens is that when a new form of media arrives that is better adapted to a specific environment than others, it tends to push those less well adapted out of it.

If the older media has no other habitats then it does get replaced, but throughout the history of media it's been more common that the older media merely retreats into their core environment. Occasionally it gains a new strength because its practitioners refocus their efforts on the form's strengths.

And, in turn, the new form only matures once its practice stops being defined and studied in the context of and using the terms of its predecessors.

In a mature field, when it comes to *practice* the fate of a form's predecessors is immaterial. It doesn't matter if the predecessors die out, thrive, or become relicts, you can learn from and steal from them. The only things that matter to those making the new form of are the two following questions:

1. How do we make it?
2. How do we make it, *better*?

Get started. Start simple. Make it. Improve. If you want to compare your work to something, compare it to the best of *your* field, not to the canon of a predecessor that is drawing on a thousand years of distilled genius and intellectual wealth.

Where are we now?

Ebooks undoubtedly mimic the pages of print, transforming them from unavoidable fixtures of the medium to a optional tactic to control the structure and pacing of reading.

Digital text is structured prose, just like print text, but it gains a new, important, feature: links. In the words of hypertext toolmaker, Mark Bernstein: 'the most important new punctuation mark since the comma'.1

Digital text gives a writer the freedom to be less textual if they wish, adding video clips, audio, and assorted interactive elements into the mix.

Digital text exists and is produced within a completely different context from print and, as we shall see, the changes it introduces bring with them their own distinct set of problems.

Here is one problem that will not, despite how much we wish to, go away:

We, the authors of this text, have no substantive idea how you are reading it. You might be flicking between the simulated pages of an electronic remediation of the original text assembled and bound for print publication, you might be reading that primary, intentionally designed, bound and printed physical book, these words might appear from a print-on-demand service, each page

freshly produced for you the moment your credit card was accepted, or several years hence, you could be browsing the text we are writing on a device hitherto unseen, it might come to you through the droning of the computer's simulated voice, or as disjointed fragments quoted somewhere on a blog, a twitterfeed or projected into empty air by the next but one incarnation of the e-reader.

Modern text, mashed around through fluid digital media, simply cannot remain a fixed object. If you want to, you can choose to make it a fixed object, but then you obscure its specific advantages. Within a digital environment if you want the text to adapt itself to computers, mobile phones, tablets, screen readers, websites, and that one guy who everybody knows who still prints out everything he reads, you have to let it be and let go of all the expectations that have been bred through the last few hundred years of the printed page. Something that manifests as a passion for craft, awareness of the art, a steadfast belief in the power of the medium in print, becomes obsessive-compulsive control freakery in digital.

Digital typography ranges from the wispy but detailed beauty of the new iPad's retina display to the chunky 'wet newspaper' grey smear of an older Kindle's eink. The effect of a static user interface affordance changes from context to context. Pagination does completely different things to a text when its produced on a small mobile phone screen instead of a large tablet. Links signify different behaviour in an ereader like the Kindle than they

do on a website in a browser. It's all a bit slippery and wet and hard to grasp.

What makes this even harder is that you can't lock the text down even if you wanted to (and you shouldn't if you could); the reader expects a degree of control, not just over the presentation, but also how the text is used. They expect to be able to copy and paste passages into their blog or Facebook so they can talk about them with their friends. They anticipate the ability to tweet sentences without retyping them manually. They demand to be able to highlight and comment on the text itself, their notes being searchable, re-flowable, pieces of digital texts themselves, existing on the border of another.

They expect reading and writing to be two sides of the same coin, more intermingled and intertwined than they ever were in print. Their reading bleeds out into their blogs, forums, essays, Facebook updates through easy quoting and extensive links, creating direct connections between the original text and the new metacontextual satellite texts. Research tools, like Evernote, that collect text and writing, are also writing tools. Digital reading and digital writing haven't just locked hands—they've done the deed, married and have a brood of misbehaving little brats.

Text starts out as one thing and becomes several others.

That, in a nutshell, is one of the principal problems facing authors in a converged age - the degree of slippage between the intended form of the text, and the control

the reader is afforded over that form, has only increased year on year. As new platforms emerge and bring with them associated publishing standards, complex reflows of typography and layout, the relationship between physical and digital looks ever more unsustainable.

The mistake many make is to assume that digital text is somehow married to print, that, since the former won't displace the latter, they will exist in a continuing symbiosis. But print is the ex in this relationship, not the soulmate. Demands are made of digital text by its readers and by its context that it will find hard to accommodate if it remains bound to print. You can't expect all ebooks to be remediations of a print text any more than you can expect all films to be adaptations of plays. The new thing has to go off and do its new things, making its mistakes, stumbling and learning to walk all by itself.

What has been done?

It's not quite appropriate to liken a multi-decade old medium to a toddler. A more appropriate analogy would be a teenager at a dance, trying to flirt for the first time, a person who is still rocketing through change trying their first tentative steps at what they see to be a grownup thing. The advent of tablet computers and the rise of ebooks has given us several choice examples, digital writing attempting to charm the pants off somebody and, for the first time, facing the terrifying possibility of succeeding.

The advances digital writing is making are on three fronts:

- Phone and tablet apps: native applications go the furthest in experimenting with tactics and methods that are unique to digital media.
- Websites: the most widespread form of digital, or neoteric, writing, also the one that is the most established and set as a genre. The web world is picking up ideas and concepts from the native app world at a faster pace than many expected.
- Ebooks: the form of digital writing that clings the hardest to the conventions, codes, and practices of print media, often going to extraordinary technical lengths to

disable, remove, or prevent tropes, conventions, and means that are native to digital media.

Touchpress' (supported by Faber and Faber) The Wasteland stands out amongst recent impositions of literary works to a digital environment. Taking Elliot's 434 lines as it's starting point, the iPad app deconstructs the experience of reading a linear poem, and re-presents the digital text as an exploration of meaning, significance and context by means of Ezra Pound's annotations to Elliot's draft, (etc). Strip away the technically mediated, affective layer of The Wasteland's iPad instantiation and it is evident that the app is designed around the materially original (one might suggest scroll-like) format of the poem. The app does not simply remediate that form though; slavishly transferring its affordances to a new platform and intending the work to be read in an identical manner as its physical counterpart; it undergoes a process of transposition by which the material original is not copied, nor removed, rather its affordances as a 'readable' text are addressed within the transfer to a new formal environment. We are encouraged, as students of Elliot, to read The Wasteland with a book of annotations beside us. The app affords this. We are familiar with the nuance of the spoken word with regard to poetry; interpretation, emphasis, temporal specificity all impact in meaning; the app presents readings from 1933 (Elliot) through to contemporary performances (Fiona Shaw's filmed performance) by way of Alec Guinness, Ted

Hughes and Viggo Mortensen. We approach Elliot's work as acolytes, as scholars, a position the app enforces.

Flipboard is an app that aggregates various news items, blog posts, pictures, videos, etc., from all over the net. It's both mass media – it has a curated set of news feeds you can read – and micro media, with its deep customisability. Being an aggregator is unique enough to digital media but Flipboard has taken a central role, not only in setting design trends but also because of the lead its lead designer, Craig Mod, has taken in online discourse on the nature of digital writing. It manages to take its inspiration from offline print affordances while still remaining uniquely digital. The folding pagination animation it uses refers to the act of turning a physical page but actually represents an act that is impossible in print, pages just don't turn like that. No matter what you think about its nature as an aggregator and no matter what you think of the writings of its lead designer, the app itself represents a mature understanding on how digital can reuse print affordances without being a slave to them.

Visual Editions (a London-based boutique publisher of bespoke editions) venture into the book-App market has, to date, been an edition of Marc Saporta's Composition No.1. Saporta's original text - a boxed 'novel' printed on 150 unbound pages which asks the reader to shuffle and read in any order, deriving meaning from accidental juxtaposition and aleatory connection - is repurposed for a tablet platform in exactly the same format as the physical original. The reader lets pages skim past,

only stopping to read when a finger is pressed upon the screen. The page rests as long as a connection is maintained, upon removal, the motion begins again and a new, randomly chosen page is revealed at the next intervention. Once a page has been read, it cannot (in that sequence) be re-read. The digital edition, curiously, is more successful than Saporta's 1962 print experiment. The sensation induced by our inability to accurately control the next page we read is more pronounced than in the boxed edition. No-one who has ever shuffled a deck of cards can deny that control is always present to some degree. Magicians make careers of it. Within a digital instantiation of the same process, human intervention is reduced to a truly random moment, and there is no going back. Like The Wasteland before it though, Composition No.1 is built on a thorough and considered understanding of the material process of reading its physical forebear.

By far the most popular incarnation of new, interactive, text is the web, which ranges from the facile and trivial to the complex and involved. News, personal journals, fiction, commentary, recipes, travel guides, tech references, how-to guides - the web has already absorbed large segments of what before was an indivisible part of non-fiction publishing. Digital writing is already a profitable and successful mass medium, all managed without pushing books into extinction. To keep insisting on a dichotomy of print versus digital is to ignore the fact that digital has moved on. It has become its own thing, with its own dynamics, styles, tropes, structures, and patterns

of authorship. It's also managed to do this without saddling webpages with detailed and realistic simulations of print behaviour. The scroll, hyperlinks, navigation, animations, transitions, embedded movies, are all implemented without the slightest visual or tactile reference to a print counterpart.

The best example of a relatively accomplished interactive text platform that has saddled itself with spurious and useless replicas of the print context would be Apple's iBooks. Normal, text-oriented, ebooks grow further and further away from being print replicas with every successive update, but it's graphic novels that represent the pinnacle of mimicry of physical objects as a user interface (often referred to as skeuomorphism). iBooks renders each page of the graphic novel as a realistic simulation of an actual page, something that is at first jarring when the book is opened, the cover flipped open, and the reader finds the cover as the first page. Comixology, a much more popular digital platform for comics, has taken another direction. It eschews skeuomorphisms and instead renders the page full-screen, no fake page shadows or animated page curls. This lets them do uniquely digital things such as adapt the page to screen sizes and let the app guide you towards an optimal reading for your device. iBooks, by choosing to replicate print when displaying graphic novels and fixed layout ebooks, offers a compromised experience that can't adapt or fully take advantage of the digital context.

Skeuomorphism and remediation

One of the biggest differences between a child and a teenager is the teenager's attempts at identity formation. Some try to build on their closest role models; be like dad/mom/Uncle Filbert. Some teenagers try to produce an identity by taking up a readymade one with a built in social group, taste in music, and dress code. Some slide into depression as they try to find themselves. Digital writing, being more than a single mind performing a single act, is doing the same: some copy from their elders, some search for the new and the native. It's all problematic, naturally (it wouldn't be fun otherwise).

N Katherine Hayles *Writing Machines* calls to attention the instability of material transfers between forms. She proposes Material Specificity as a mechanism by which to deconstruct the existence of texts in a mixed-media ecology. For Hayles, a number of texts composed in our digital age recognise the means of their creation.

("Digital age" is an awkward term, as the digital age didn't begin with a bang or a declaration of intent, rather it slipped in through the edges when no-one was looking for it. A flood or a seeping might be a better analogy.)

Whether as an inevitable consequence of the mechanisms that brought them into being, or by deliberate intervention on the part of their author, materially specific

texts reflect the culture they were born into. It has been written many times that the computer - initially the beige box on your desk, then the silver-grey laptop and now the smartphone and tablet, is a medium that consumes all others. Several influential texts of what we might propose as the first-wave of digital criticism and futurology espouse this framework as a critical basis on which to approach content creation. Bolter and Grusin's *Remediation*, an otherwise thorough study of early new media and the emergence of natively digital artefacts, makes the error of leaving the wisdom of this foundation unchallenged.

In that respect, work that is designed to exist on those platforms, those shiny new devices with their built-in markets and credit card payments, will also consume the forms that preceded them. That's only part of the answer though. If a medium eats everything, if it remediates television, print, radio, cinema and theatre, then expelling content that is the result of that over-caloried diet is overload. Overload by a measure of content streams (twitter feeds for no reason but that they exist), fragmented platforms (video, photography and ancillary media in abundance without recognition of the purpose of a through-line plot) and overload through simple excess.

This then, is another flaw in the logic of remediative strategies in new media. By desiring *'to borrow avidly from each other as well as from their analog predecessors such as film, television and photography'*, remediated new media content exposes itself to the risk of repeating the problems encountered by each predecessor. Certainly, new media

cannot operate in cultural isolation from other media forms, but by embracing this strategy, its potential is curtailed, and in doing so, any opportunity to genuinely develop new form is strangled at birth.

Exeunt Book

The book as a model, as an interface and object to be replicated, has no role to play in digital text. It'll continue to exist as its own thing, as it has for centuries. But it is a mistake to assume that the book has any bearing on how digital text evolves from here. It might have at the start, decades ago, but the web, ebooks, interactive media, and apps have each manifestly become their own thing, each growing on its own in new directions.

The development of ereaders are a microcosm of this process. Apple's iBooks launched as little more than a book simulator but with its latest version it supports dynamic EPUB3 files, multi-touch ebooks created in iBooks Author, and interactive fixed layout ebooks, each less book-like than their predecessor.

(EPUB3 does suffer from very serious flaws, most of them stemming from a desire to replicated print conventions and systems that have evolved over many years, but those issues are irrelevant to this discussion.)

Ebook platforms such as the Kindle and the late, lamented Readmill cite social reading, shared highlights and annotations, and discussions as big features of their systems. The ebook, from the reader's perspective, has evolved into a beast very unlike the printed book with advantages, features, and capabilities unique to the medi-

um, a beast that interacts with, and responds to, the reader in ways that print never can. The reader has power and influence in the digital context that writers can use to their advantage as long as their willing to give up a little bit of control.

Non-fiction apps, museum catalogue apps, reference and dictionary apps, all have broken with the book model both in their user interface and in their structure. Free from the book-spine-pages model, they experiment with native app-like tools for searching and reading.

And the web...

The web is a glorious and ugly thing. Full of horrendous designs, cluttered pages, inane prattle, lies, and idiotic writing, it is also an unending reservoir of information, eloquent text, heartfelt emotions, and loyal communities. There is nothing like it and it is fundamentally and ultimately a text-based medium. If it isn't the future of writing, it will be a big part of it and deserves to be analysed as such.

The Form of the Thing

It is possible that we've stumbled into a cultural state that devalues the idea-of-the-book and fetishises the book-as-object.

Let me explain.

What's happened to paperback sales in the last five years (it's mid 2015 as I type - this is worth bearing in mind) is, depending on your position in the industry, either a wholesale cannibalising of paperbacks by eBooks, a steady, inescapable plateauing of digital sales at the expense of the physical and a reduction in trade book sales overall, or something in-between the two.

What is scary is that the eBook, regardless of what is likely to happen to platforms (Kindle, Kobo, iBooks), exists as a reduction, a facsimile of its print forebear. My colleague, and the other voice in this text, spends a great deal of time troubling technical developers and working to find solutions to a problem that need not exist.

Obligatory mis-quotation from Nick Cave:

> We are designers
> We manipulate typography

> We understand margins and leading
> But we are tired of all this self serving deceiving
> Go tell the publishers that we're leaving.

There's nothing wrong with digitising books, but there's a fundamental mistruth at the heart of the e/print relationship. The book is an object, and as we've suggested in the previous chapter, digital text is fluid, and can change. A physical book cannot do that.

But we persist in seeing one thing as the other. We write one thing and accept the imperfections of the surgery to transpose that one thing from a printed page to a digital screen.

That's not to suggest that we should stop improving the process.

The book, though, is different. It is a thing that offers possibilities and potentials that are markedly different to digital.

What is a book?

What's your relationship to a written work? Peter Mendelsund explores the instability of reading in *What we see when we read*, suggesting that as reading is an immersive activity, during which we remove ourselves from the lived world and forgetting to provide detailed context to our experience (beyond where we were, what time of day it was), then the feeling of reading is actually the memory of having read, and is a false memory. We impose our unconscious onto texts, to sketchy descriptions of character (Mendelsund takes some time to describe this process - quite brilliantly - by challenging our 'picture' of Anna Karenina. Go read his book. It's better than this one) and we build something unique in the space between the author, the text and the reader. Reading, Mendelsund reminds us, is not like watching a film. It is not fixed. It is personal.

The book, in that case, is a vehicle for ideas, and those ideas are not fixed things. They talk to each reader differently.

What do we do when we digitise books? Do we attempt to retain that fragile tension between object and author, reader and memory? Do we appreciate the platform's role in that tension?

We do not.

What to do differently?

What we can do differently is exert some small shift in the reading experience.

Consider pace. We read quickly, slowly, at our own chosen rate. Some of us skim, some pore, some bounce or scatter our attention across a page. We can turn back, quickly, to check we didn't miss something, and race ahead at the close of a chapter, at a crucial, tension-filled moment.

Robin Sloan wrote an essay called *Fish* for iOS. He describes it as a 'tap essay'. Each 'screen' (the content is delivered in tiny chunks of text, making typographic use of a phone's landscape screen) delivers the next in sequence by a tap. Sometimes a word, progressing toward a complete sentence on the current screen, sometimes a single word that gives way to the next screen. The whole thing is a little over 1000 words long. The essay reflects on our relationship with digital technology and asks us to think about what we treasure, what we go back and read again, and how often we don't. The first thing you notice, as a reader, is that there is no facility to go back.

We can only go forward, into the essay.

Paying attention.

Like this.

Of course,

this

is

not

devoid

of a back button.

Sloan does more than just slow down the pace of reading though. Fish is concerned with the way in which we interact, in that we 'favourite', we signal to the writer, or the world, that this is something we consider worthy of our attention. Fish looks at the internet, at digital writing and reading, and reflects that world back to us.

Were Fish to be published as a bound volume, the effect would, of course, be completely different. Not that that stopped anyone before.

So, what is digital writing?

Writing is a personal process. There are books, and courses, and classes and a month in which you're encouraged by everyone you ever wanted to follow on Twitter to write a novel. No-one can really tell you how to write though. You do it by writing, by finishing things and then moving on and writing something else. You try and be more like the good stuff you read and less like the crap stuff you don't admit to reading.

Digital writing, or writing for digital platforms or technologies, is different (we're going to deal with that) and identical (finish things, test them, move on).

There are some ground rules though. To call them rules is possibly an overstatement: *þumalputtareglur*/rules of thumb. These are the decisions and directions that begin to take on that 'smells about right' feeling we all so love after having consumed enough digital media, and written some of your own.

—*Take a deep breath. In through your nose. This'll take a while.*

Digital writing is messy and full of seams

Like so many other media, digital writing started out by copying its predecessors. Academics wrote academic papers and put them on their homepage. Companies wrote serious company things, copying their mission statements and brochures, and posted them online.

But it is in the nature of hypertext to bleed together. That's it's signature feature. Not just links but also aggregation: collections of text collected, mixed, and represented online. And once the various texts begin to bleed together, styles, tones, and voices that are separated by context in print, butt up against each other in digital. The writing of multiple authors appear together. Casual intrudes upon the formal. Conversational text is interspersed with the analytical.

This is both inevitable and proper. Don't judge hypertext by the standards of print writing. Judge it by its effects on the readers.

All writing has an audience

You might not care about them, or you might picture them with your work, but they're there. If writing is an act of communication, then you're communicating with someone, somewhere. Writing on a digital platform is no different except insofar that sits quite a bit closer—right on your screen, next to your draft in progress. Care about your audience (even if you pretend that you don't), and find out who they are. Especially if you're going to make your process visible.

Audiences on the web are or become communities

What separates the web from other media is that the audience also sit quite a bit closer to each other. Groups that have something in common will form a communities on the web. Sometimes a single interest will be the driver behind many disparate communities. Sometimes they all congeal into one fandom. They vary, but they all have in common a certain inevitability: the web is made up of communities.

Iterate in public wherever possible

Make your mistakes in the glare of the spotlight, and you'll be rewarded when you hit the right note. That's horribly glib, and even as I typed it it sounds like a snake-oil salesman's pitch, but there's some truth in there too. The web is a crowded marketplace, and you're vying for attention with social networks, 24 hour news and more distractions than you can be bothered to find. The App-store (Apple and Android are both guilty of this) are a colossal mess in which you'd be hard pressed to find anything without a Geiger counter and a bloodhound. Online bookstores are better, but unless you want your work to be read only when an algorithm dumps you alongside the thing your reader was *actually* searching for, then be the subject of that first search: iterate and develop in public.

Iterate away from things, not towards them

You think you know where you're going? You don't. You know where you are, what you're starting with, and the rest you have to find out. Think of yourself as walking out over a frozen lake, prodding ahead with a long and pointy stick. You may know you want to get to the other side (having goals is a fine thing, very good in moderation like so many other things) but you definitely don't know how. Don't head directly for the goal, that's a good way to plummet through the ice and drown in the waters below. Search for solid ice close to your feet. Accept the fact that you might have to take the long way around and be open to finding other things on the way. Be guided by the community around you: pay attention to the markers they have placed on the ice.

Finish and publish things

You're never going to know whether there's a beautiful idea in there unless you get to the root of it. Work fast, too. If you're going to work in public, you need to give the public something on a regular basis. Not too regular; nobody cares about the daily output of a high fibre, all bran diet and nobody will care about your too-regular output. Its consistency doesn't matter and it doesn't matter if it happens easily and smoothly every day while sitting in your bathroom, reading. Publish things more often than you'd like—if you aren't at least slightly embarrassed by what you put out, you're waiting too long—but make sure it's valuable to your audience. It can be rough but it has to have value.

Build big things out of the small

If you want to make something interesting, something that challenges you, excites you, and has a chance of doing the same for the audience, you need something more substantial than a line of breadcrumbs from thereabouts to there-again. But since you don't know exactly the path you're going to take (see frozen lake metaphor above) you can't just architect a grand cathedral-like epic project, not if you want to have any real hope of completing it. So, build big things out of the small. First lay the foundations. Then build the walls. The more you've built, the more ambitious your projects can become, until...

Expect to fail

Not because failure is a good thing in any way. It sucks. It's an awful thing that stops you in your tracks, sucks all of the energy out of you, throws you in an emotional cycle of doubt and self-recrimination, and sends you off to the sofa to eat chocolate and watch Parks and Recreation while you rebuild your emotional energy. It's horrible and all of the people who fetishise it are rich bastards who've earned enough money to soothe the pain. Failure *is*, however, unavoidable. And, once you've pulled yourself up from your chocolate binge and finished all six seasons of Parks and Rec, it is an excellent learning experience. (But, what do I know? All the stories and songs about failure I heard while growing up in Iceland involved drowning at sea or ended with ravens pecking the eyes out of your bloated and abandoned corpse. Thank $deity there are only so many seasons of Parks and Recreation to watch.)

'Hackathons' aren't useful

They have little to no practical value for *making* in most cases and their social role can be easily supplanted by meeting up in a café. As an exercise, they are pretty pointless. Here, with attribution, is Clare Reddington on innovation:

> You can't crowbar your innovation and change into one weekend of the year. And its best not to invite 200 talented people to share their ideas with you if you don't know how you might support them and take them forward after the pizza has run out and the room has been tidied.

Hackathons are brilliant ways to focus energy and time and talent, but they're part of a process of development, of changing something. They're not it alone.

(Back home in Iceland the university departments have a traditional outing called *vísindaferð*, or 'science trip'. These trips generally involves the students visiting a company related to the subject matter they're studying. Once there they then proceed to get absolutely hammered with the employees of said company sharing war stories, past failures and successes, and embarrassing stories that tell you what the industry's culture values. I

think all hackathons should be replaced with 'science trips' in the Icelandic style. Everybody would go home happy and well 'connected'.)

It's fine not to know what you're doing

No-one else out there has the faintest idea what they're doing either.

That's why these are thumb-rules (*þumalputtareglur!*), not rules-rules. Know the field. Try things out. Make something, then make it better. Develop a nose for what people do, not what they say they do. If they've made a lot of work, then they probably know by trial and error what works for them, and they certainly know their audience, but deep down, they're working this out as they go along. As are you. Write, create, and explore. We can't tell you the recipe for making this work because we don't know. Nobody does.

You cannot, and never should, 'digital' something for someone

If some bright spark anywhere, no matter how well paid they are, suggests that you 'digital' a piece of work for them, or a process, then walk out of the room. Preferably with your dignity intact. Digital work takes as much thought, as much care, as print, or performance. This isn't to say that creating digital versions of pre-existing works is a bad thing. This rule of thumb is about not working with people who constantly pronounce the word 'digital' with audible quotation marks. They're all hell to work with, each of them has their unique and adorable way of completely fucking up your life. They don't understand what they want. They don't understand what the audience wants. They don't understand what you can do. They don't understand what the work can do. They are what the platonic ideal of Ignorance aspires to become when it grows up. So just don't work with them. Unless they offer you a fuck-ton of money which would leave you in the black for the next six months. If that's the case, take the money and use it to fund your actual practice. (Sometimes dignity means not eating canned food and not living in a cardboard box.)

Copy the tourist trade: make snapshots and souvenirs

Constant iteration is a fact of like in digital. Platforms change and if you don't keep working, the work will disappear. But that doesn't mean you can't create lasting artefacts out of the process, they just don't come at the end (like they do in the print world) because the end in digital only comes when you're dead. Create ebooks, print books, posters, t-shirts, apps, postcards, and prints from the ongoing work. They're like the commas and semicolons of the sentence that is the work. They create space between the iterations and give the audience something to remember the work by when you've finally given up on it and retired it.

Critics are useless

For just the same reason as the 'faintest idea' rule above. Just ignore them. Keep making work. Make it better.

Actually, let's slice this particular onion a little bit finer. Critics come in three types:

1. Professional critics. Largely academics or pundits. As written above, largely useless but can be harmful if you annoy one of them too much. Avoid.
2. Audience critics. A reader criticising something they read, pulling it apart, finding what did and didn't work for them. Awesome stuff. Totally irrelevant to you. When the work reaches that point, it's their thing, not yours. Don't mistake author-audience dialogue (which is that relationship you have with the community you are a part of) with intra-audience discussions. Telling the two apart is relatively easy. Don't be an arse and pretend otherwise.
3. Peer critics. Another practitioner picking apart how you did things and the effects you got. Useful, but both of you need to be in a space where you can give and take detailed advice. A lot of people don't know how to give it. A lot of people don't know how to take it.

Version control, please!

For the love of God, use version control and then back it up, off-site. It doesn't have to be a fully fledged Git install. As long as it doesn't involve you repeatedly using 'Save As...' with an ever-extending filename suffix ('-version-15-nice-edit.doc') it's fine. Unless you are writing code. Then you really should be using a code-oriented version control system. Like, Git. Too many people have lost too much work for this to be anything but an utter and total requirement.

There's another ground rule, but it's not one that can be summarised in a pithy little paragraph. A sentence though, is possible:

The Medium Matters.

Hang on. Bear with me. I'm going to make this a proper big-arse heading. All fancy-like. A big thing needs to look like a big thing.

The Medium Matters

There you go.

We're going to come back to that again and again. Not that we're invoking the spirit of Marshall McLuhan, but each platform offers something specific to the writing process and keeping that in the forefront of your mind is critical. Put another way, a film isn't a TV series, nor is it a Broadway play. The end product, whatever that might be, is going to impact how you write.

Now, we're not going to trot out McLuhan's arguments out for yet another parade. If you haven't been convinced by his witty aphorisms ('the medium is the message'), tortured metaphors (hot and cold what now?), and glib style, running them past you once more won't change a thing.

Instead here's a note from one of his intellectual predecessors, John Dewey, who in 1934 in *Art as Experience* outlined much the same argument but in more detail:

> Because objects of art are expressive, they are a language. Rather they are many languages. For each art has its own medium and that medium is especially fitted for one kind of communication. Each medium says something that cannot be uttered as well or as completely in any other tongue. The needs of daily life

> have given superior practical importance to one mode of communication, that of speech. This fact has unfortunately given rise to the popular impression that the meanings expressed in architecture sculpture, painting, and music can be translated into words with little if any loss. In fact, each art speaks an idiom that conveys what cannot be said in another language and yet remains the same. (p. 110)

Less pithy than the 'medium is the something something' line, sure, but by overflowing his sentences he gives the argument a little bit of space to breath. But if you want it in buzzfeed-y list fragments:

- Each medium has unique modes of expression, structures, and idioms.
- You can't 'translate' or remediate these various media in to text (or any other media) without losing something.
- Much in the same way, you can't separate out meaning (message) from the form (medium) any more than you can translate idiomatic Icelandic phrases into English and expect everybody to get what you're saying.

If you have the looks on your faces that I think you do, then everything here is totally walking on its hind-legs, know what I'm saying? (*Að ganga á afturfótunum*.)

Which brings me to the other bit about the medium and why it matters. Languages aren't just spoken. They are also listened to.

Dewey again:

> Language exists only when it is listened to as well as spoken. The bearer is an indispensable partner. The work of art is complete only as it works in the experience of others than the one who created it. Thus language involves what logicians call a triadic relation. There is the speaker, the thing said, and the one spoken to. The external object, the producer of art, is the connecting link between artist and audience. Even when the artist works in solitude all three terms are present. The work is there in progress, and the artist has to become vicariously the receiving audience. He can speak only as his work appeals to him as the one spoken to through what he perceives. He observes and understands as a third persona might note and interpret. (p. 111)

I highlighted the important bit for you. Ain't I nice? This here:

> Even when the artist works in solitude all three terms are present.

Explains quite neatly how an artist can edge their way into a mode of expression that has no audience yet, which is exactly what the early interactive media authors did. They've spent fifty years exploring the digital terrain, building new idioms, testing what structures and grammars work for that particular language. It's still young and it's still immature but it's a medium of its own and that matters.

But it also matters that it is a part of an ecosystem of art and media. That's where digital media borrowed or stolen a lot of its characteristics. It's the genetic base it mutated from.

Which leads me to this last quotation from Dewey (for now):

> If, moreover, we establish the discussion on the basis of media, we recognize that they form a continuum, a spectrum, and that while we may distinguish arts as we distinguish the seven so-called primary colors, there is no attempt to tell exactly where one begins and the other ends; and also that if we take one color out of its context, say a particular band of red, it is no longer the same color it was before. (p. 235)

Digital media is our band of red. That we've chosen to focus on it isn't intended to diminish or slight the other colours. It's all good. Our 'red' just happens to be the youngest of the bunch and that's why it warrants a bit of love and careful study.

Its youth makes it interesting in its own right, both to creators and to the audience.

Don't get seduced by adaptations

Bureaucracies have an inherent dislike of risk. It goes against their very purpose. The reason why you organise around a task is to be able to solve that task reliably, repeatedly, and economically.

A key part of accomplishing that is not taking risks.

Organisations, bureaucracies especially, exist to minimise risk. Every organisation that's still functioning is built with an awareness of the need for risk, because stagnation is itself inherently risky. But when the risks start compounding, organisational norms and values kick in and somebody, somewhere hits the brakes.

"Can't you just make an adaptation?"

Interactive media is inherently risky for a lot of organisations. Digital production doesn't fit neatly into their pre-existing production processes. Digital products don't slot nicely into their business models. The form and structure of your average interactive media project is unfamiliar. The tools are new. The long- and short term costs are uncertain.

In the face of all of these non-negotiable risks, the natural response of many is to grasp at the one risk that they think they can manage.

(That is, provided they just don't say no to the entire thing in the first place, which is the likeliest response, all

things considered. But let's assume, for the moment, that you've passed that hurdle.)

"It's just seems more sensible to work with an existing property, if we can."

There's nothing wrong with adaptations and licensed properties. Adaptations have a long history across the various media. Movies, novels, games, TV—adaptation is a well-proven tactic that often inspires enormous creativity. (If you let it, that is.)

The problem isn't with the concept of adapting and reworking stories into new form.

The problem is with the idea that they are less risky. They aren't.

They are *more* risky.

Unless you pay through the nose for a top-tier property, pre-existing properties don't give you much of an advantage in terms of sales or marketing. If the property is well-known then there's the risk of over-exposure and a sheer lack of originality. If the property isn't well known then you may as well be working on something original as far as the audience is concerned.

But the biggest risk of adaptation for interactive media is structural. Adaptation risks locking you into plots, structures and ideas that are simply not conducive to interactive media storytelling. You can work around it but in doing so you risk losing the core advantage of adaptation: a story that an audience recognises and craves while being presented in a way that appeals to those who are fans of the original.

That audience can easily turn on you if they don't think you've done a good enough job on the adaptation. The backlash that an angry fanbase is capable of is ferocious.

Unlike adaptation, original work can build its audience on its own merit. It will be judged on its own quality and originality.

Original work is often easier to work with in interactive media, minimising process risk, because there is less of a mismatch between the structure that the idea requires and what the medium lends itself to.

If it actually works, if the project *does* take off (unlikely, but possible) then you own all of the upside.

The failure is yours to own both with adaptations and original work, but only with original work is the success wholly yours.

Own your successes. Own your work. Avoid adaptations.

The problem with comments

Comments are an in-a-nutshell representation of the problems that communities have on the web. Namely that everything exists in the same context. Communities are what the web does but communities are also utterly unprotected in the comment sections of most websites.

Any community that you build through comments is vulnerable to invasion, raiding, and hijacking by roving bands of internet assholes.

You only have a few options in this situation:

- You can close the comments section and rely on social media (and maybe forums) for your community building efforts.
- You can make commenting *harder*. Require registration. Make it harder to join.
- You can spend a fortune on moderation.
- You can give the commenting community tools to defend itself.

Of all these options, the first one is not only the easiest, it is also the tactic most likely to succeed. Social media is where modern online communities are. . That's where they are built and maintained. The major downside is that you become dependant on somebody else's platform

but that is just an unavoidable part of the web today. No matter what you do, you are always going to have to rely on other people's platforms in some way.

The 'I need to follow all of the discussions' fallacy

One of the common arguments for keeping comments on a site is the idea that in doing so you pull in discussions from the web that would otherwise take place somewhere else.

This is untrue in a couple of ways.

1. The discussion will *always* be spread across the web. Social media means that any hope of controlling or centralising the discussion was lost ages ago.
2. Keeping track of all of other people's discussions is a very bad idea. Some, sure. All, no.

Remember how readers tend to react when an author randomly butts into a discussion of a book? Yeah, they react pretty badly. (As they should.) Publishers and writers, even journalists and columnists, have no business intruding on or participating in discussions of their work unless they have been *specifically* invited.

The only discussion you should follow on the web about your work are the ones in communities you are already a part of. They don't have to be communities that you build but you do have to be a long-standing member.

Don't be rude and butt into other people's conversations. Don't be egotistical and expect everybody to discuss your work in the places you want them to.

Think in terms of community participation and your online discussions and comment threads will be more pleasant and fruitful.

What does the reader want?

The first thing you'll be told by most people in publishing is that readers don't like change. They like what is familiar, what can be understood easily and doesn't scare them. Which is possibly true.What is certainly true is that entrenched interests don't like change. They like what is familiar, what can be understood easily and doesn't scare them. It's worth saying that a position of conservativism here isn't *necessarily* a bad thing. Industries have been around a lot longer than you and I based on entirely that foundation - not rocking the boat is a safe, steady path. But, if we're going to extend the metaphor, the water is getting choppy, and there are big fish out there just waiting to be caught.

Readers do like what is familiar. They like to be told a story - a little while after her death, a Susan Sontag essay addressed this point[1]; she remarks that '*A novel is not a set of proposals, or a list, or a collection of agendas, or an (open-ended, revisable) itinerary. It is the journey itself – made, experienced and completed*'[2]. However, as the title of this book suggests, digital stories are not *necessarily* novels, and that's a critical distinction. If we persist in thinking

of them as a novelistic form, in creating them that way and assessing them against the requirements of the conventional novel (much more about this later), then we're going to get nowhere, very very quickly.A better course of action might be to ask ourselves why we write, and why we're interested in what writing on a digital platform might be?

Why do we write?

To communicate an idea. To tell a story. To explain the world.

Because we can't not write.

1. It's not available at the Guardian website anymore, but here's a cheeky link: http://laurencemiall.com/stuff/pay-attention-to-the-world/ ↩
2. The whole essay is sublime, perfect and a genuinely must-read for anyone thinking of writing for new platforms and audiences. Know what the territory is, and address it. Especially if you think you can do better. ↩

Why do we want to write for a digital platform?

Now that's a question we're not going to approach an answer for. You have your reasons - you might anticipate an alternative to linear narrative, a challenge that's not been met by the physical book, an escape from formats and expectations. Your reasons are your own, and we'd be the last people to inquire after them. What we will say though, is that to really grasp the nettle of digital technology, you have to anticipate that this is *different*. It can be more than a novel in a digital wrapper (and if anything has come through loud and clear, then it's that digitalling the novel is a waste of everyone's time). It can be something we've not seen yet. Something exciting. Something risky and something not-of-the-now.

That utopian ideal, though, is our biggest problem. How do we conceive of something that is so unfamiliar, so not-now that it really addresses the what-could-be of digital. Here's another way to look at the problem:

Every piece of Science Fiction is addressed through a lens of now. We cannot avoid this. The techno-utopian ideas of Star Trek are projections from the 1950s and 60s. Solaris is Russia. Star Wars is the United States. Writing SF in 2014 without addressing Climate Change in some way or form is to deny contemporary culture[1].

It is with writing and reading. Every great leap forward has been built on what we understand, what we see around us. The CD Rom failed because it wasn't *different enough*. DVDs are VHS are cinema in a portable format. Hypertext is

Now that's interesting. Hypertext is different. Not so new as we think (Borges, Bush, Nelson all predate your authors by a few dozen years), but still a radical step.

What we did with it, though, is largely predictable (If you're reading this in your own order, here's a good place to go. We didn't really try anything *new*.

To repeat a phrase, that's our problem. Our brick wall. The fog within which we make work. How do we do things differently? How do we break out of conventions?

1. Read this: https://medium.com/matter/it-s-not-climate-change-it-s-everything-change-8fd9aa671804 It's by Margaret Atwood, and it will make you think. ↩

What is a digital book?

It's cheating to offer a definition that's built on absences, but a digital book isn't a novel. It is capable of many things. Of fluidity, of transmediality, of fore and backgrounded linkages between platforms. What it might be is all of those things, and it might be only one. It has to be something though.

- It isn't a game.
- It is something that acknowledges the past (the novel, the conventional book, the reader and the text) while reaching for something fundamentally new. It strives and it tries and it entices and satisfies. It understands the potential of technology, just as Gutenberg did in the fifteen century, and it changes things.
- It does not forget to tell a good story.
- It is public, and it is private, whenever it decides. It knows that we read differently. It recognises the network, the playful spirit and the serious business of writing. It is short, and it is long. It is both of those things, just as the book is. It has boundaries, because Susan Sontag is right, and things have to end. It is confident, just as Austen showed us how to be, and it does not hide behind a facade of counterfactuality when that is a facade.

- It does things that books cannot do. It controls the means of its own reading, dictates and delights in equal measure.
- It scares and shocks. It shows us the inside of a character's head, just as a novel does, but it does so in ways that a novel cannot.
- It is deliberate and it is not a fallback, or an addition to another form.
- It has purpose.

How we build that is the next step. What we ought to consider are what of those things we want, and what we're happy to leave behind. We're not going to need all of them all at the same time. Making decisions about what's in and what's out is a good start.

Agrippa.
Going back to go forward

In 1992, the designer Denis Ashbaugh and the writer William Gibson collaborated on a peculiar piece of storytelling. Part digital experiment, part Artist's Book, part prophecy, part archeology. *Agrippa* is a limited edition book-as-object, presented in a case, wrapped in various linens and metals. It's form screams 'commemoration' and 'preservation' and the title of the piece - a brand of photograph album owned by Gibson's father, calls back to an analogue object.

The Artist's Book isn't a bad model to examine when making digital work. Especially as it's inbuilt rarity appears to exist in complete contradiction to digital's mutiplicity. Artists make books to present work and express ideas. They live within a fine print tradition, and often challenge the physical conventions of the book to the point of being unreadable.

If we address their scarcity as a function of production, rather than intention (the processes used to make them are typically much more intensive than a sizable print run could accomodate), then the philosophical underpinning of the Artist's Book as an exploration of **form as it relates to content** is worth serious consideration. Conveying textual elements, rather than being

the primary goal of a book, are often secondary here. What is foregrounded instead is a dialogue with the book-as-object, a tactile thing to be handled and considered as well as read. Pages may open as a concertina structure, sometimes bound within a section as an interruption to the page flow. Equally likely is a three-dimensional treatment of the page sequence as something to be explored in an unlinear fashion. The whole book may be presented as one sheet of folded and cut paper, or take the form of a paper engineered object.

(Francisca Preito's Antibook, which exists as an origami icosahedron)

The nature of these approaches to making books might suggest a disregard for the reading experience, but closer examination of Artists Book practice reveals that

the field is actually driven by a sincere desire to investigate the outer limits of book design, and provoke an ongoing conversation about the borders of the Avant Garde, as it might be applied to the book.

Gibson and Ashbaugh's *Aggripa* is presented as follows (text reproduced from UC Santa Barbara's exemplary Agrippa Files site, which examines the book in all its aspects and contents):

> The Deluxe Edition of *Agrippa* comes in a heavy, distressed case. In the honeycombed bed of the undercase, wrapped in a shroud, lies the 11⅛ x 15 ⅞ x 1⅛ inch book, whose title is hand-burned into the cover. The Deluxe Edition contains 63 viewable pages with ragged, sometimes scorched edges, including copperplate aquatint etchings by Dennis Ashbaugh alluding to DNA gel patterns and body text pages consisting of dual, 42-line columns excerpting a DNA sequence from thebicoid maternal morphogen gene of the fruitfly. Page 63 (and another underlying 20 pages glued together) has a hollowed-out cavity holding the diskette with William Gibson's poem.

Agrippa originally appeared during the earliest years of contemporary digital technology, and reflects a number of concerns under discussion during the early 1990s, many of which have not abated today. The nature of digital content as a permanent record of our lives, the nature of memory and the impact of technology on reading

and the impossibility of possessing an 'edition' of a digital work. The entire content is reflective of a primary concern with these issues. Ashbaugh's etchings explore our common ancestry though images printed on rag paper and presented as loose leaves inside the metal case. Gibson's 305 line poem - a meditation on Gibson's and his father's youth and their relationship with the photographic images Gibson Snr made during his life - is arguably the most striking aspect of the work, and accordingly of most interest to digital writers. The poem is contained on a 1.4Mb diskette and when inserted into a 1992-era Macintosh computer, displays the whole text, line by line, as it slowly scrolls up the screen. On completion of the 'reading', the poem is encrypted by an additional programme within the disc, rendering it unreadable, remaining in existence only as the reader's memory of the text, of their experience.

What makes *Agrippa* such a pertinent example of digital writing is the implicit connection between subject matter and overarching theme, and the manner in which technology is employed in order to foreground those themes. Genuinely, form follows content, and the two are inextricably bound together. Where the poem to remain on the disc, it would not convey the power of the central idea at its heart. Simulating the moment would not suffice either - employing javascript and css to 'erase' website text is fairly simple, but remove a cookie from your browser's history and it is readable once more. For *Agrippa* to function as it does, the scarcity of the book

form has to operate alongside the physicality of the disc - you have no backup, there is no 'escape' key. Reading this work renders it unreadable, and it can only persist as a shadow of itself, lodged in your memory as are Gibson's memories of his father.

Gibson and Ashbaugh understand something vital about the connection between story, platform and their reader:

Writing for digital is not the same as writing for print. Everything is connected.

Choose your own adventure

++to readers: this next bit is almost certainly going to be reworked in a major way - it doesn't work as it is, but says useful things. Comments and edits are welcome++

Why not Choose Your Own Adventure?

Caveat - this short essay pertains to digital implementation of Choose Your Own Adventure. Paper is fine. Go for it.

(This essay originally came about because Duncan Speakman tweeted to suggest the Sherlock Holmes piece we were working on could offer more in the way of agency to the participant, proposing a caveat that he knows how much I hate CYOA)

I've managed to cultivate a reputation over the last few years for being the most anti-Choose-Your-Own-Adventure critic/creator in the world. People have come up to me at conferences and remonstrated about how I've made their careers more difficult, I've been tarred with a don't-mention-the-war brush whenever CYOA is whispered by someone within my earshot.

Here's the thing. I don't hate CYOA. I think CYOA, done well, is a terrific tool for digital storytelling and immersion, I just think that I've only seen it digitally done well a precious few times in the last twenty years or so. I

really don't hate it. I do hate what it has become; a catch-all for interactive behaviour, for any sense of agency and immersion, for 'that's what digital does'.

I do think it's the lowest common denominator, the lowest hanging fruit in the orchard, and so it's the one that gets picked far too often. It's a shortcut. It's a default setting that won't frighten the horses, the commissioners or the audience, and those are two sets of people who should be frightened all the time (if that's your thing).

What it does, when it's used as the shorthand for interactivity, is take away from any sense of agency available. CYOA is a mechanical hinge - a device to get from one piece of action (or story, or event, or decision) to another, to impart some 'responsibility' for that scene to scene transaction to the reader, rather than the author. By doing so, by taking away agency from the author, it usually reduces the story on offer.

For some context:

CYOA derives from a range of paper-based (game book, but stick with me, that they're paper is important here) series of works popularised in the 1980s and 90s, which do their job really well. They (sorry if this is obvious, but I think it's worth saying) break a larger narrative into small sections, the 'decision point' in each being offered to the reader as a conscious intervention into the delivery of the story. In doing so, and especially when they're under-

stood alongside paper and pencil and dice games of the same era, they provide a single-person equivalent of what is necessarily a group activity - roleplaying games. RPGs have a storyteller at their heart - the Dungeon Master (DM) or equivalent, who is guiding the action, introducing threats and generating story on the fly (if they're doing their job well - in my experience, those who relied on 'what TSR said here' were pretty poor at their role, and soon fell by the wayside); RPGing is about emergent storytelling. Or, put more simply, about letting story emerge from player actions. What CYOA does/did is remove the DM from the equation and provide an imperfect, but adequate, substitute in the person of the author of the book. And that's a hard sentence to write - with no disrespect intended to writers of paper-based CYOA, who have carved out a difficult niche. CYOA then, operate in relation to specific other media - and importantly, other shared experiences, and it's worth remembering that as we go forward.

Here's another thing, another problem. Most new (or emerging) media remediate another media form. It's an in-between state, a transition from being one thing (film as recorded theatre, for example) and becoming something that's native to the new medium itself (film, with the conventions of editing, mise-en-scène, etc) as the new medium matures, and creators figure out what to do with it that's genuinely new and exploits affordances of the new platform, new technology and its audience's relationship with those things. Certainly, digital CYOA is reme-

diating the analogue, paper-based form it apes, and that's fine, insofar as it goes. But, given that CYOA - the text-based adventure format - was one of the first modes of literary play available on the computer, isn't it time we saw something new? Something native to digital media that isn't simply a computer-based copy of what came before? It's been twenty years, after all.

CYOA exploits something particular to the form of the book - in its physical state - we read a book, conventionally speaking, from front to back. The form of the thing is shaped that way, to guide us through chapters, cliffhangers, changes in character and narrative perspective, driving us forward, through the text toward the last page and the eventual reveal; the conclusion. We have a tacit understanding of how that works because the book (the one in front of me now, for example) has a fixed number of pages (in this instance - 91, it's a short novel). As we work our way through the text, we are continually aware of how far we've come and how far we have to go in a simultaneous, forward/backward state. I'm a short way through this book, and so there's a lot of story to go, a lot of things still to happen, a lot to be told by the author. All of those things are tied up in the physical form of the book.

CYOA messes with our heads. It subverts those physical affordances of the book, or the page count and offers us something markedly different. The story does not go as far as the end of the book, in fact it's very likely that it will end - through decisions we've taken, or by the ran-

dom roll of a dice - a good way short of that final page. On the one hand, that signifies that the story is shorter, is contained in some way by our actions and by the mechanic at work, but conversely, it suggests that there are many stories contained within these pages - that just as our route is not a function of a linear page count, then the world we're exploring through the pages (and paragraphs, and fractions of narrative) is much larger than one bound by a strict order. There are other routes through this, other paths to take, and each one is a different journey.

Those things are a function of CYOA's relationship to the book, to the physical, bound object. They might be an accident, but they are there nonetheless. In a digital instance of CYOA, they don't apply, and have no relevance. For a digital CYOA, I have no idea how long (in relation to a bound whole) the hypertext is, my understanding of that length has nothing to do with a physical object that contains it, and there are no analogue conventions with which to play. Digital is hypertextual, is functionally fragmented and broken into pieces; that's its natural state, not a subversion of the usual rules of storytelling and form, and that's principally why I'm still waiting to see a digital CYOA that finds something new to say about form, about expectation. To continue to ape an analogue antecedent as if it were still 1995 is a missed opportunity.

That's not to say there have not been valuable steps in a natively digital direction. Geoff Ryman's *253* is a hy-

pertextual, CYOA-derived text that does something new with the form, and does so well aware that it is being read in a digital space, not as a book (the print remix of 253, published after the fact, falls far short of the smarts present in the digital first edition). Ryman's work extends into digital non-space, it's physical analogue the boundaries of a tube train, rendered through html tables and textual links, by the relationship of one passenger to another.

Robin Sloan's *Fish* isn't CYOA, but is hypertextual writing. Sloan is completely aware of the mechanic that hypertext offers, and *Fish* is designed to reflect that mechanic. It can't be read any way other that forward, and the skim-reading we're used to employing with digital work is used against us here. The essay is about attention, about what we value, and how we read, and *Fish*, while not being CYOA, is a direct addressing of how digital hypertext works, and should tell us something about the native mechanics available to writers.

CYOA, as a digital catch-all solution - if you want to see how far this perception permeates then try having a conversation with; a TV executive, a publisher, a director; in fact anyone who works with story and storytelling (Bring up digital storytelling and set a timer - you'll have to deal with the CYOA question before the end of the first coffee) - is a vicious double-edged sword. It opens a conversation, and provides common ground, something that everyone present can understand, and curtails that conversation by its sheer ubiquity (BBC, I am looking at you here, you are guilty of this in spades). That it pro-

vides a common ground isn't a bad thing, but it is all too frequent for the common ground to be the foundation, rather than a conversation starter. Projects are made that adopt CYOA as a default mode because no-one thought any harder about the subject after that initial conversation; money is poured into them, the project eventually sees the light of day; it generally falls far short of what everyone thought it was going to be; the digital-as-new discussion stops dead.

Then we wait for the cycle to begin again with a new set of characters in a year or so's time.

(Faber, where exactly is Iain Pears' *Arcadia*?)

Form is never more than an extension of content. The phrase I repeat most often in life, in art, in writing. The form of story, the mechanical tricks and formats you employ, should inform and be informed in turn by the content of the story you're telling. CYOA isn't a broken mechanic, far from it, but the way we're using for digital storytelling is tragically broken. It explores something interesting about the shape and form of the printed book, provides a single-player substitute for a shared, social experience. The form (CYOA is a form) needs to find it's native expression within digital space, it needs to find stories to tell that can only be told that way, stories that don't remediate existing narratives, or are simply being shoehorned into a CYOA shape because it looks easy to do so.

There are two things you can guarantee as a result of that:

1. It isn't as easy as it looks. CYOA is a particular mechanic, and form is tied to content in ways we haven't figured out yet.
2. Shoehorning is painful and unnecessary. Your readers will be unsatisfied, no-one outside your production team will think it's any good, and you won't have told a good story. Not even close.

   In conclusion: I really don't hate CYOA. I hate the lack of ambition it represents. It forestalls development by hanging on the oldest thing, the first form. It has become the lowest hanging fruit, and each time it's used as a default mode, a much more interesting project never exists. CYOA is a mechanism that deserves attention, and care. It is capable of imparting subtlety, being used with grace and with attention to the nature of the platform, of the technology, and of the story. When it isn't, that's when I hate it.

What does the writer want?

The first, and possibly the most important question that a creative individual ought to ask is what do you want from a digital book?

If that answer is an adoring audience, or to be rich, or to get laid, then put this book down and become a rock star. It's a hard road, and you're going to have to learn to play an instrument (your voice is an instrument, by the way), but you've got about as much chance of achieving those goals in music as you have in digital books, and the food is better.

If you want digital to test you, to give you a means of reaching interested readers, or to create new ways to tell stories, or make beautiful things, then keep reading.

Before we go any further, we'd like to lay a few myths to rest. They're not myths in that they're imaginary tales of gods and monsters, rather they're a Barthesian model of dominant ideology. They're a third order of signification that are very rarely challenged, because culture take the denotation and connotations associated with digital and technology for granted. Because we don't take about dominant ideologies, here goes:

Digital is expensive

Bullshit. Digital can be expensive, and digital projects made without a clue to the reasons you're making them are almost certainly going to be expensive, because developers have to live too. If you don't tell someone exactly what you want, or learn to talk to them about what that is, then you're going to be paying through the nose. Digital isn't inherently expensive though. Certainly no more expensive than your time is when you're writing, and definitely cheaper than a hoarding on the side of a bus, or in a tube station. Suggesting that the imagined expense of digital is a barrier to even starting is cobblers, and cowardice. A book needs to be in print, be warehoused, shipped and promoted. Even an eBook needs editing, designing and maintenance, and we're all capable of doing those things.

Digital is hard

This one isn't without merit - knowing what you want, how to achieve it, and avoiding the pitfalls isn't going to be easy, but neither is writing a novel. A combination of techniques, practices and persistence will get you a long way. Digital is hard when you overstretch, when you reach for the moon, or throw everything and the kitchen sink at something (see the next chapter for some of this). It's significantly less hard when you try to do one thing well, maybe two, and work hard at learning how to get those things right.

Early obsolescence

All digital projects are going to be obsolete with the next (OS, new technology), so we're not going to bother until we can be sure this isn't a flash in the pan.

Oh come on. This one rears it's head every few years. There's some validity to it (as above) but no-one ever wrote a book without a plan for reprints, or an acceptance that it might be remaindered or disappear from stock . The same approach ought to be true of digital projects, but all too often manifests as an extension of *Digital is Expensive*, or, *Fear*. Yes, OSes are going to evolve, and new features and technological jiggery-pokery are sometimes going to cause you a problem. Most of the time though, this is solvable without breaking the bank. There are also alternatives to Apps. Html5, run natively through a website, is not going to suffer the same upgrade issues as a bespoke App, and be considerably more flexible in the process. There are some things that demand an App - a contained experience, GPS driven content, using specific hardware features of a mobile device, but if that's the case, then your project ought t be considered in those terms too.

Choose your own clichè

Digital is choose-your-own-adventure / open-ended / transmedia / insert-your-own-cliche.

First of all, see the earlier essay. Digital can be all of those things, but it needn't be. If you want to create one of those formats, then go for it - you'll learn a huge amount by doing, and trying, and falling flat on your arse halfway through. Digital can be subtle though, it can toy with little aspects of expectation and familiarity. It can pull the rug out from under our feet, just as Orson Welles' *War of the Worlds* did, or *The Blair Witch Project*. Big ideas that come down to tiny adjustments in the rules of storytelling. It can be books, augmented by digital trickery, it can be difficult structures that require a wall full of post-it notes to make sense of while writing.

Digital can be a notebook, and a pen and an idea. It begins, as all good work does, with a spark of imagination; a 'what-if' that demands to be answered by unconventional means.

Don't go it alone

Writers aren't born finished. Great works of entertainment don't emerge ex nihilo, rather they are worked in utero, Many hands and minds contribute, either in the development, the writing itself, or the editing and assembly of a work. That is true to a lesser of greater extent with most literature, but is critically important when considering digital projects. Writing is a craft that is learned by doing. Finishing things, moving on the next and continually honing your mental muscles. While we've tried to puncture a few myths, one that remains true is that this field is very rarely one that can be addressed by a single individual, working alone. At some stage, you're going to have to talk to someone else.

Blessed isolation and the writer's life are going to part company.

If this is making you nervous, then take a deep breath before you read on. It isn't going to get worse, but you're going to have to come to terms with letting go of your work and trusting other people. You might be, and we stress *might* here, one of those very lucky people who's talents take them many directions at once. You might be able to code, to design for user experiences, to produce a technically complex project of which the writer is but one (albeit pretty important) part. The likelihood

though, is that you aren't that individual and that if they do exist, then they're so rare that Maharajas will pay explorers a chessboard's worth of grain to find them. You're also not going to find them, or the gang of them that you need to get to know, by placing an advert in the post office, virtual or otherwise.

So, how do you find your team?

You don't.

Think about it. If you have an idea, a world-shatteringly brilliant notion of how to recast the shape of your writing for a digital platform, then that idea has been gestating inside your head for the best part of a year or more. Probably more. You've lived with it like a second skin, a portion of your brain that keeps knocking on the door of the rest of your life demanding to be heard. It's yours, and for now, you're the best person to figure out what happens next.

Don't ask for help.

Show people how they can help.

This is where a writer's key talents - communication, brevity, creativity, shaping things, doing not telling - come into play.

The best way (caveat - this is not the best way, but we're being provocative, and want to offer something more useful to you than the usual advice about gathering a trusted and talented team around you, which is just so bloody obvious that it should be struck from **every** guide to digital in print) to find your creative partners is to get them to come to you.

Show them how they can help.

Make work. Make it badly, and make it well. Make it with the few tools you know how to use, and make it with the tools you're just learning to use. Make paper versions, and figure out what it is you're trying to do. Use photography and a pen and a cheap printer. If you can't afford a cheap printer, use your local library (in fact, use your local library regardless: they're important and they're warm) and print there. Learn incrementally, and learn in public. Get better and figure out what it is that you want to make.

As Austin Kleon would tell you: **Show Your Work**.

Then talk about it. Make the conversation as public as you can. Online, at conferences, at meetups, anywhere you like. If you're open to collaboration and the work is interesting, then have a little faith in humanity and see what happens. You aren't alone, and a well honed idea has a better chance of seeing the world, and being seen, than your first draft, your first sketch on the back of an envelope. You've then got a refined idea, and if you've been at all diligent about the 'learning' aspect of our advice, you've got a few verbs, a bit of the basic grammar and a smattering of the sentence construction required to talk to the people who do know how to do the things you don't.

Then, and only then, do you ask for help.

If you are not a writer

Then what's written above is doubly important. Good digital work requires preparation, thought, time and talent. If you're a UX designer, then be on the lookout for projects that interest you. If your skills lie in a specific region of the coding geography, then push yourself out of the easy answers and see what can be done if you apply those *hugely* valuable skills to something other than an Angry Birds knockoff . As with illustrators, designers, and especially publishers.Here's the thing - and just to make sure that its a thing, there's a whole section about it later on (or will be), aimed squarely at publishers wanting to get their head around what they can do with digital, and how they do it without going insane and / or bankrupt - we chose the title of this text very carefully.

This is not a book

We believe every word we've written here. Especially the short 'What is a digital book?' section in the previous chapter. The biggest mistake you can make is thinking of digital projects as books. They are not - from the manner of their reading, the platform on which they're read, the means of their creation and especially their commissioning and curation. Your business is built on a combination of measured risk, paranoia and pessimism countered with an unhealthy dose of unbridled self-belief and optimism. It has survived for so long because what you manufacture is genuinely valuable and your processes - as laboured and ground-in to your entire business as they are - work toward producing those precious paper and board objects that keep the whole wheel turning.

You have to change those processes if you're going to work with digital writing. No-one in their right mind believes that the same production process will work in film as for publishing, so why would you try to shepherd a digital project to completion using identical processes as a conventional book. Sales forecasts, costs, returns on investment and justifications all need to be rewritten. Just as we've asked writers to know what it is they want from a digital project, we're asking you too. Why do you want to pivot your business to a new market? So far, you've done

an admirable job reengineering physical books as digital facsimiles, but the tone of the conversation has to shift, and is shifting toward what the medium is capable of. You are more than intermediaries in the creative process - you enable it and you support and nurture it - we'd like to explain some things though.

Neoteric

The Mote in Your Eye

Here goes. This is the academic bit. We make no apologies for it, as missing this point is the singularly most important thing that's landed us in the state we find ourselves today.

Remediation is a flawed strategy.

The manner by which we understand a new medium is completely intertwined in our understanding of the media around us.

The initial content of a new medium is an old one.

The computer is the medium that eats all others. It consumes their affects and spits out its form, whole and subsuming all that came before.

Okay, in English then.

When a new thing emerges, our understanding of it is filtered through what we already know, what we have around us, and can already make use of. Hence television is 'radio with pictures' or 'film in a tiny screen'. Film is 'recorded theatre'. There's nothing inherently wrong with that perspective, since any other point of view is almost impossible to imagine. We filter and we understand because we live *in* the world. Then, over time, as a medium matures, we reassess what it can do. It shows

us. Bright, talented people make work in it that define the edges and shape the insides and gradually generate a grammar for the form. It grows up. Until then, its arguable that the medium is an infant; defined by how closely it resembles it's parents. Hang on to that childhood metaphor; we're going to come back to it.

The problem (there are many, but let's take one) with accepting that viewpoint is that we do live in the now, and now has an awful tendency to pronounce. For example: "*the new medium remediates by trying to absorb the older medium entirely so that the discontinuities between the two are minimised*". Well, it might, and it might not, but when that kind of absolutism is taken as gospel, then problems start to arise. A book is not an App. Taken that way, looking at the problem backward, it seems plain and clear. But we treat Apps (and a whole range of other digital experiences) as books, as if we can design and produce them in the same terms, as if they're the same thing. The new thing isn't the old thing, it is a new thing. A thing with it's own rules, affordances and properties. A thing that needs to be understood, explored and addressed as if it were something we hand't seen before. Until we can do this, we're blind men appraising an elephant, or Durer etching his rhino.

The new deserves a name, a way to distinguish it. We're going to use neoteric.

Escalating requirements – cyanide for projects

"What about magazines?"

It'd be fun here to pull an Anna Karenina reference and spin some yarn about digital projects being all unique in how they fail, but it just wouldn't be true.

What is true is that almost all digital projects—software, web, specifications work, even web 'content' creation—die the same way: in a cycle of escalating requirements. It always starts out fine, "We need to start a blog", "We need to standardise a thing for doing 'foo'", but then, like crows to carrion, the sh-sh-shoulds start flocking to the project.

"We really shouldn't just do a blog for just this project. We really should do a department blog as well."

"Oh, and the engineering department really should start one as well. We need to bring them in."

"Exactly. And that means we really should choose a blog system that supports an arbitrary number of blogs. Something like Wordpress MU instead of the regular kind. Sysadmins will have an opinion on that."

"That means we really should put together a blogging policy. Which means we need input from the HR, possibly the CEO."

That's just the beginning. Before you know it, the project is either indefinitely delayed and over budget, or it has been outright cancelled. And if you are really really unlucky, you will see the over-specced project completed. Which is when you'll discover that you have created a monstrosity: too many features, unusable UI, unstable as hell, buggier than an ant farm. The simple project that was supposed to solve a single problem in a simple way becomes a major productivity tax on your organisation.

Standards are especially prone to this cycle of doom except it rarely manes to kill off the specification: nobody gets fired for creating a horrible horrible specification. They always start off intending to create a simple solution to a shared problem but immediately the requirements start escalating.

"What about magazines?"

"What about academic journals?"

"What about cookbooks?"

"What about textbooks?"

Before you know it, the new specification is larger, more complex, and less usable than whatever proprietary solutions it is replacing. If you're really unlucky, the standard ends up being worse than the problem it's supposed to solve because you now still have the original problem but also have to deal with a bunch of buggy implementations of a half-baked standard. You don't get fired for creating a horrible specification but you do get fired for not defending your employer's turn in a standards organi-

sation, even when giving up that ground is the right thing to do.

All of this has a simple solution: just say no. Pick a *small*, clearly defined problem and *just solve that problem*. Don't solve or fix *anything* else. Don't worry about not solving it in a clever enough way. Don't worry about future extensibility—at most you base your solution on somebody else's who has had to worry about it.

"But what about magazines? We really should keep them in mind. You can't just ignore a major potential use case."

Yes, we can. Just don't fall into the trap. Solve the first problem first. If you later find that that solution is too simple to use elsewhere—good!—that means you probably struck the right balance between usability and complexity. So you just start over:

1. Pick a problem. A small one. Clearly defined.
2. Solve just that problem and nothing else.
3. Ship it.

You can't create a complex system that works from scratch. You just can't. And you can't *fix* an existing complex system that isn't working by making it more complex. ("We really should maintain backwards compatibility.")

Incrementally built simple systems that interlock into complex systems are the only way to create working large-scale digital projects. Don't fall into the trap of escalating requirements.

Choose your context

The contexts of our lives used to be separated physically. Bringing your work home with you was next to impossible without a suitcase full of documents, reference books, and memos from your colleges. Or without, you know, building a factory at home. Gossip and news from non-work friends was exclusive to certain physical locations like the coffee shop (or the pub, if you belong to one of the being-social-means-alcoholism nations). Work gossip was literally a water-cooler moment. Doing an activity that normally belonged to one context in another took a lot of effort.

Computers and the internet virtualise both our tools and our location. And in doing so they make our various contexts virtual and shift the burden of keeping them separate onto us, the user. The makers of computers, phones, and similar devices have collapsed our various contexts together without paying any attention to what that does to us. It is up to us to figure out how to maintain and separate the various contexts we need for optimum productivity, creativity, satisfaction, and joy.

There is another name for this context collapse that you might be more familiar with: distraction. Minimalism and distraction-free environments don't address the fundamental problem because they think the problem is

our inability to handle information (we can handle it fine, thank you). The problem isn't complexity but information from another context intruding into your current one.

Each type of work or play you do deserves its own content. It isn't a question of simplifying or disconnecting—although that can work—but of making sure that the signlas you are getting and the complexity of the environment is appropriate to the task.

Here are some common ways of creating your own work contexts:

- The simplest way is to do what the writer Tobias Buckell does: create a separate user on your computer for your work. That way you can customise what apps are installed and wall off parts of the network without disconnecting completely.
- Just disconnecting and turning off the wifi on your computer isn't enough to create a new context. It needs to be distinctive enough for your subconscious to never be in doubt as to what context you are in. That's why you shouldn't eat at your desk and that's why, instead of just turning off your wifi you should instead go and work in a local cafe or in that one room in your house that has no wifi reception.
- Another option is to do parts of your work with analogue tools. It's an easy way to create a completely new mental context for what you're doing. Writing, storyboarding,

sketching, and outlining are all tasks that can at least partly be done using analogue tools.

- Separate contexts into devices. Keep work on the laptop and social media on the phone. For a while I had a rule where I'd write the first draft of everything I wrote on my first-generation iPad using a bluetooth keyboard. Tablets are getting cheap enough to be bought and used as single purpose devices (games, browsing, reading) relieving your other devices of the burden of maintaining multiple contexts. Migrate the personal away from the laptop and gradually turn it into a pure work context.

The key to tackling 'distraction' isn't minimalism or decluttering (although that can work as well) but keeping your various contexts separate. You can do that without replacing all of your apps or buying a separate laptop for work.

It does take a bit of organisation, but then so does almost anything interesting.

Transmedia

We could start this chapter at any one of several points, and each of them get something fundamental across, so let's start with a set of disparate beginnings.

1. Interactive media, our teenager, is almost fully grown, and has experienced a number of things since adulthood loomed over the horizon. Fashions may come and go, but the appeal of subcultures, of associating with something that offers identification with a herd, a common perspective and ethos, appeals to every young person. As digital writing has begun to mature, it takes stock of its surroundings and realises that far from a childish pursuit, the industry that has developed around games, and digital games in particular, is growing at an incredible rate, eclipsing the niches occupied by hypertextual narrative and MMORPGS. Our teenager's peers are embracing a new form of storytelling - coined 'transmedia narrative' - and it seems that here, at last, a culture born intertextual, postmodern, might find a voice.
2. There is a contract between author and audience. Maintained and supported by the text (the story, for want of

a better catch-all), it asks them to build worlds, populate them with believable characters and then send those newly created personas off on adventures. World building is one of the principal functions of good storytelling. Talented writers craft an environment we can believe in. It might be ours, it might be a little off-kilter from the norm, but it is a world, and we build it together.

3. Technology is ubiquitous. It's everywhere. We carelessly transmit the details of our lives through social networks, as naturally as breathing air. Our digital exchanges are as real as those in the world. They might not have the virtue of physicality, but we pay as much attention to them as we do to a handshake, the expression in someone's eye. Sometimes we pay more attention.
4. If we live and breathe digitally as much as we do physically, then why should we deny our characters and their world that same freedom. In fact, surely granting them the same detail, the equivalent texture, is world building too?
5. You know, we can do it, so why shouldn't we.

Each of these origins, addressed individually, might give rise to a singular approach to digital storytelling - and each can, in fact, do just that - but together they merge, overlap, infiltrate each other's territory and what we get is this:

Transmedia storytelling.

There is much to be admired about Transmedia work, and we'll celebrate each of them in turn, but as a whole,

it's a mess. A huge, sprawling, cacophony of world and story and technology and virtuality and illusion that has no centre, no point, and very often, no control. Ursula K Le Guin put it eloquently (Ursula K Le Guin never puts anything less than eloquently, and we should read more of her writing) in From Elfand to Ploughkeepsie:

> There is only a construct built in a void, with every joint and seam and nail exposed. To create what Tolkien calls "a secondary universe" is to make a new world. A world where no voice has ever spoken before; where the act of speech is the act of creation. The only voice that speaks there is the creator's voice. And every word counts.

Transmedia wants to have its cake and to eat it. It wants the construct to be provided - the fabric of the world exists, ready to be populated with tweets and status updates, with diary entries found pinned to the wall of a child's bedroom, with knowing asides to the camera (because Transmedia knows that a camera is present, all the time) - and it wants the pact between author and reader to be easy, to be smoothed by this plasterwork and nails built by other hands and never questioned. By wanting everything, by eschewing restraint, it wastes and scatters. It is lazy.

If transmedia works at all, it is when it restrains itself. When it nudges into another platform just to show you something storyable, something that pertains and cannot

be told another way. Writing is rules, and care, and (Le Guin again):

> It is a journey into the subconscious mind, just as psychoanalysis is. Like psychoanalysis, it can be dangerous; and it will change you.

What Transmedia is good at is the illusion of emerging story. Like serial fiction, Transmedia narratives emerge a piece at a time, over time and bit by bit. They slip into the world and draw their readers into a story that, in not presenting itself as a finished thing, suggests that it is happening now. Not in a galaxy far far away, or on some lonely shore, or in last night's dream of Manderley.

Transmedia is adept at imitating the real.

That's not terribly helpful though, if you're dead set on writing a story that is going to be told across synchronous platforms. The real is probably as far from your thoughts as you need it to be. What you need to know is how to use each platform and, more importantly, when to use them.

Before we get to the practical advice though, a little more history and context (you can skip to the end if you only came here for the practical stuff):

Transmedia offers the inclusion of ancillary content as an available feature of digital's platform agnostic potential. As elements to be utilised, video, audio, first and second person records, diary entries and confessionals, maps, illustrations and games are all present within a broader platform that 'consumes other media' and reme-

diates that content in language and grammars familiar to their analogue forebears. It is perfectly natural that digital storytelling should seek to include those previously invisible content streams as elements within a connected, intertextual landscape.

Henry Jenkins, then Professor of Communication, Journalism and Cinematic Arts at MIT, reflected that transmedia storytelling - the coordinated use of storytelling grammars across platforms - can work to make characters more compelling. It's a persuasive argument; as readers become conversant with each other's presence on distributed media platforms, and as they observe and embody the performance exhibited by blogging, social media and other aspects of telepresence, then offering those facilities to characters in a fictional universe ought to render them more clearly, with fuller personalities, nuances and contradictions than is available in the linear, closed system offered by conventional writing practices.

What has emerged though, outstrips Jenkins' proposal for narrative synchronisation across digital channels. When characters in a TV show are gifted blogs in the 'real' world, communicating with viewers (now readers) in real time, regardless of the temporal status of the primary channel of narrative delivery, the result isn't synchronous characterisation; it's shouting. Their twitter accounts might engage with conversation with each other and with a remote audience, imparting some sense of consequence to that communication, but they lack the constructed nuance of dialogue and mis-en-scene present

in an authored, closed textual space. Book content extend into video material, as extra-textual trailers for the primary text, where they at least function as a marketing lead for new audiences, or less cohesively as video diaries seemingly aping the narrative function of found-footage film familiar to audiences viewing 'The Blair Witch Project'.

Transmedia offers the opportunity to engage with the characters in a story, to be a part of the storied events. It is difficult to match the intention of a crafted paragraph with the multiple-channel, cross-platform future we seem to be wandering headlong into. Worse, its even harder to imagine who is going to pay attention long enough to actually read it all.

Transmedia devices extend narratives into games, in fact, it could be proposed that they are the result of a financially attractive games industry being eyed up in a bar by a hard-up linear story. Jenkins observes the narrative causality of 'The Matrix' as a particularly prominent example of this; the release of the second and third films in the Wachowski's film trilogy was accompanied by short fiction within the universe established by the first film, a series of animated films broadening the narrative foundation of the series, and a computer game which provided a key element of the second film's plot sequence, without the completion of which certain elements of story within the third film make scant sense. Picking apart elements of story construction in as large an endeavour as 'The Matrix' is not the role of this volume, and howev-

er constrained by time, cinema release, technology or audience each element might have been, the question that remains unanswered by proponents of transmedia story form is this: to what extent is each element necessary to the overall story? Or is it simply well constructed fanfiction within that world; not adding anything of consequence, nor illuminating character in a manner described by Jenkins.

Since the emergence of a set of paragons for transmedia form - 'The Matrix' as cheerleader in chief - that difficulty of marrying form to content to intention has remained. It is possible that the wholehearted adoption of transmedia form by established production houses, and the subsequent emergence of a generation of writers capable of creating content within those platforms is a result of the fragmentation effect of remediated media forms, however what remains is a sense that all too often, new platforms and ancillary content - blogs, games, social media all - are included within a product's release because then can be, and not because they should be.

Examining transmedia storytelling, we are confronted with a cacophony of rhythms constructed to achieve affect rather than story, to imbue atmosphere through sound and vision in place of good storytelling.

Transmedia is Sigue Sigue Sputnik.

That's the problem. When we throw the contents of the whole kitchen cupboard at story, it just makes a mess. An inedibe, glutinous, sticky, disorienting mess. A recipe

is built up carefully, with attention. Let's get to the cookbook.

If you want to write transmedia, then don't make the mistake of thinking that The Matrix is what you're making. The Matrix is loud, and expensive, and you can't remember what happened in the second film, can you? What The Matrix represents is a marketing executive's dream of what digital storytelling might be. Dedicated readers (superfans - we'll use this term again) will seek out and devour everything, at a fair amount of expense, and while they might represent a decent income - for as long as their attention is on you - they don't last. Marketing transmedia is brand extension, is a campaign to sell someone else's product and it's beneath you.

Let's look somewhere else. Somewhere more interesting. Somewhere, for a writer, that's not film.

John Clute, in his review of William Gibson's Pattern Recognition (2003), identifies within Gibson's text transmedia phenomenons useful for Transmedia writers to consider:

> It would be inappropriate – this early in the life of the book – to strip the latter parts of the story wide open; but this can be said. All 135 sequences of the footage (film fragments released anonymously on the internet by the 'Garage Kubrick') to date are numbered steganographically – that is, through a complex process of 'digital watermarking' which must be deciphered to be read – in a pattern that seems unmistak-

> ably to represent the map of some urban area. That the pattern is in fact not a city map, that it is in fact something whose implications wrench the heart, the reader will discover. For the pattern, and the story embedded in the pattern, and the maker of the pattern, are one. Together, they are the wound of the world doing story. (2003: 405)

Clute isn't terribly interested in digital writing. What he's identifying in Gibson's story - through the means of its telling - is, beyond the demand for decoding; a substructure that nods toward something else, something storyable, something that pertains and cannot be told another way. When Transmedia restrains its ambition, it can achieve something as subtle as the substructure of Gibson's tale. The implication of utilising technology to tell a story suggests that the action of the reader is somehow required - somehow manifested - in the uncovering of meaning. Gibson is interested in story, and the manner in which technology can be utilised to tell a story in a new way. That does not equate to letting the technology tell the story though: In all of Gibson's work, new tools and techniques are the ground in which to work, not the work itself.

Brand extension is a way to work with digital elements though. While The Matrix' transmedia elements amount to little more than a reworking of Lucasfilm's Expanded Universe vision for the Star Wars series, it is possible to approach the extension of an existing text in a

way that demonstrates some aspect of the narrative left unsaid, or in need of explanation, although this is not without its own problems.

Jeff Vandermeer's Southern Reach trilogy sits squarely within his 'Weird Fiction' stable of work. The first novel - Annihilation, follows the twelfth expedition sent into a zone (of Southern Florida) out of kilter with the rest of the world. The manner of the story dictates that each character is referred to only as their role - the Biologist, the Surveyor, the Psychologist - a naming structure that extends into their documentation of Area X itself. Annihilation had a digital 'extension' http://join.thesouthernreach.com, designed to work as a taster for the book, an incursion into the real world and a bridge back to Area X. Within the site, viewers are introduced to the themes of the novel (paranoia, deception, implanted suggestion and a larger, quasi-governmental organisation pulling the strings) and invited to undertake a training and selection procedure, making decisions about how to react to what Area X contains.

The Problem of the Primary Platform

Southern Reach's digital site is an example of unease and paranoid behaviour. The decisions you're invited to take (and their consequences) are made more tangible by knowledge of VanderMeer's book and its contents; which is not to say that they don't make sense without foreknowledge, but southernreach.com operates in a curious slipstream between Primary and Secondary platform.

Here's the thing:

If the audience for the digital comprises the potential audience for the book, then it's the first platform they find. The task of the website could be proposed therefore as enticement, to persuade each viewer to part with their money and buy the book – the goal of the whole exercise. However, that audience don't have anything to work with other than the digital content. It also has to function as the Primary Platform for the period between first click and the reader's encounter with the physical book. It's caught on a high wire between enticement and exposition and has to face in both directions at once.

That's not to say that it isn't successful. What thesouthernreach.com shows is how appreciating the edges of genre can provide focus; the act of defining a new space, the effort that takes, narrows something useful

around it. We pay attention to the world being created. If you're asked to work on a Transmedia project then, the first thing to ask is why. Not why you, but why is is the shape it is? What is being achieved by each platform? What is the intention of giving this piece of information out in this way, rather than in a central, authored text?

What, in short, is the point?

Unchapters and Raw Sharks

Steven Hall's 2006 debut novel *The Raw Shark Texts* is a clever, layered piece of writing who's surface is a metaphysical adventure story about a man how cannot remember who he is. Eric Sanderson suffers from a recurring fugue state brought on by his encounters with a conceptual Ludovician shark[OBJ]. That the book is an extraordinary piece of writing should go without saying - it is - what is more useful here is the way Hall extended the narrative out of the confines of the textual object itself. The book comprises 36 chapters and can be read (and deciphered - this is a cousin to Danielewski's *House of Leaves*) within the written and visual text alone. Hall conceived of the work as a larger thing though, and 36 unchapters exist outside of the central text. From the horse's mouth:

> For each chapter in The Raw Shark Texts there is, or will be, an un-chapter, a negative. If you look carefully at the novel you might be able to figure out why these un-chapters are called negatives. Not all the negatives are as long as a full novel chapter - some are only a page, some are only a couple of lines. Some are much longer than any chapters in the novel. About a quarter of them are out there so far. (It's an ongoing pro-

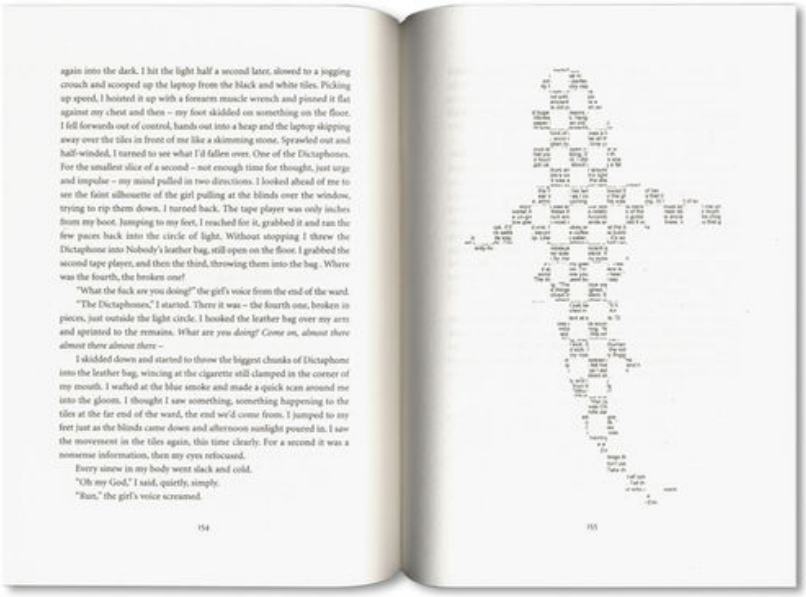
> ject set to run for a while yet) Not all of the negatives are online, some are, but they're hiding. Some are out there in the real world, waiting to be found. Anyone with the Raw Shark UK special edition will already have Negative 6/36 and anyone with a Canadian edition will have Negative 36/36 (and also a good idea of what some of the other negatives are). The negatives are not deleted scenes, they are very much a part of the novel but they are all splintered from it in some way.

To date, only a few unchapters have been found by readers. Most remain undiscovered and their existence is unconfirmed. Addressed as a marketing strategy for the novel, this might seem an unsuccessful enterprise. The attention Hall and the book has received, however, is tied into this vision for a book that does not stop with the binding and endpapers. Hall suggests that an unchapter was attached to the underside of a bench outside Glossop in Derbyshire [OBJ]until its removal by persons unknown prior to 2009.

Is this transmedia though?

If you want your cross-media extensions to be showy, pinging across the page and constantly in motion, then it probably isn't. If, however, you're interested in writing that recognises the importance of story to drive a technical extension, then it certainly is. Hall's suggestion that a careful look at the novel explains their existence can be interpreted as meaning the unchapters are the echoes of

Eric's story in our world (the book is acutely aware of its existence as a medium for story to take place in, down to the textual rendering of the shark's appearances) and an extra-textual reification of the events of the text. They exist - and it does not matter whether we have read all or none of them - as a set of negatives from which the positive prints of the book are fashioned. The simplicity of the idea slips past the primary / secondary problem outlined above and fuels the engine of discovery they demand.



Fan fiction is what Transmedia wanted to be

One of the most popular forms of expression on the web involves shared narratives that span text, video, illustration, interactivity, comics, and even animation. Crowds of people spontaneously organise to create and distribute some of the most creative works available online.

I am not talking about Transmedia. I am talking about Fan Fiction.

The multi-platform storytelling that we call Transmedia is an attempt to replicate the creativity and involvement of fandom communities. A corporation doing this artificially is akin to trying to culture bacteria by replacing the growth medium with antibiotics. Multi-platform fan-created media can't be replicated on its own, without the fandom, because it isn't a "thing" but a symptom. Fan fiction is the spontaneous expression of a creative and collaborative community with a shared interest. It isn't a media artifact but one characteristic of many of a vibrant community.

The community is the thing, not the media.

To truly replicate fan-created media you first need to make something that interests a lot of people. Then you need to nurture the community around it, make sure it

has spaces that are safe from *you* and your involvement and then you hope for the best.

If you have enough fans and they feel safe enough to do so and if they care enough about your work, then they will create. The diversity of the stories and the media they will tell will be directly proportional to your fandom.

Trying to build that phenomenon artificially from the top down will always fail.

What do Books do?

What you read defines you. What's on your bookshelves is a signal to houseguests, potential partners, friends or casual acquaintances who've dropped in for tea. A library, however small, is an act of vanity. We display books, treasure them and show them off to indicate how far we've come as adults.

I do anyway. Don't invite me round for dinner, unless you want your shelves examined.

But why do we read? What do we want books for? What might that tell us about writing for digital?

Here's a thought to start with. An obvious one, but let's agree to begin somewhere.

We read to escape. Books feed our imagination, nourishing the parts of ourselves that ask for something else, for a more interesting life. Books show us worlds, and people we can never be. Even if those people are our own age, or live in the same city we do, the fact of their being written about lends them an authority we don't have. We ask that their stories have a point, and go somewhere, but really; the fact of their existence is enough.

Unread books, too, exist. Someone much smarter than me said that a book isn't a book until it is read, and while there's some truth in that (a kind of pre-emptive reification [1] of the written word), it is true that books contain the promise of existence too. Someone wrote this thing that's sitting on your shelf with a paper bookmark jutting out of the first chapter. Someone imagined a life and a world and a plot. You'll get around to reading about it someday. If you don't, then your children will.

If books feed the imagination, then is digital writing any different? Should we approach creating a digital text any differently than a conventional novel? Do we need to?

Well, it's probably no surprise that we think you should. Digital books - when considered as a book - are very different animals to their printed counterparts. They don't really exist, for a start. They're icons on your tablet, or a filename in an eReader. Maybe an App that's in both places. Regardless, they don't possess the same sort of gravity that a book does. That book you have with the bookmark poking out of the pages? You're going to get around to finishing it, one day. It sits there and reminds you, every time you dust the shelf, or look for its neighbour. Its digital cousin doesn't make the same claim on your conscience. It can sit there for years and not be noticed. Frankly, that you only paid pennies for it too, is not going to drag you back to its pages either. If the digital book doesn't exist, aside from some disk space and an icon, then what's the offer it makes? What drives your reader to it?

Here's a partial answer.
It isn't the desire to finish it.

1. being the act of bringing something into being. Making an abstraction concrete. Blame Nick Harkaway, I was listening to the audiobook of "The Gone-Away World" when I was writing this section. ↩

The thing about books – the artful object

There's an art to books. Not just in the writing but in the physical *thing* itself as well. A book, with meticulously laid out text, carefully bound leafs of paper, and well chosen covering, has always been an object of art. A scroll can be ornate and decorated but a book is a luxurious mess of craft affordances—thousands of tiny details that lend themselves being well attended. A book is a creation that rewards a creators patience and skill with an embodied beauty.

A book is an object of art.

And when you have an object *of* art, you have *an* art.

That art is the novel's frame. To steal words from the deconstructionist ramblings of the *bricoleur* Derrida: a frame surrounds the painting, comments on it, defines its boundaries, separates it from its context, surrounds and envelops it, and yet is not a part of the work proper.

That's what a book is to a novel. To say that a print book is the only real book is to say that you prefer the commentary to the story, the frame's gilding to the painting, and the threshold to the house itself.

The author may have made the commentary, the artist may have framed the painting, and the threshold may have been chosen by the architect, but it isn't the work itself.

Which isn't to say that the novel can be separated from the book, just the opposite. No matter how many times you reformat, convert, scan, digitise, or remediate the novel, it always carries a ghost of the book with it, hanging on its bones like the wraith of a long lost love. No matter how thoroughly you debone a carcass, the meat and the skin will always be shaped and structured by the skeleton it grew on.

The novel, like all genres that originate in the book form, is defined by the book.

The thing about books – affordances

A book is a set of structural affordances wrapped up in paper. Much like a door has to fit the doorframe to be useful, a novel has to fit the book as a frame if it is to be read, understood and enjoyed. In return, the book's affordances give the novel a readymade structure that it can hang on to, refer to, and build upon.

The author can break these affordances, but with that they signal to the reader their intent to break away from the form. The reader can break them as well, but in doing so they have to actively deform or destroy the book, clearly veering away from the reading experience the book affords.

A few of the book's qualities:

- Each page can only be viewed next to the page opposite and they have a clear, set, and bound order. Rearrange the pages and you have a different book.
- Each book holds a specific set of pages. Switch the pages and you have a different book.
- Each page holds a specific piece of text. Change the text and you have a different book.

Think about the structural definitions of novels and other book genres. Textbooks rely on the embodied nature

of memory. A piece of information read is a physical property of the book: it exists on a specific page which lies in a specific place within the book object. Structuring the text into unchangeable page divisions means that references have to be footnotes if the reader is to experience them in the referring context.

Every act of change to a book is either destructive (i.e. clearly not a part of the author's intent) or a new book.

Let's talk about Hybridity

Yes, let's. We've skirted around the subject for so long, teasing the definition and suggesting that it is somehow superior to the status quo

One of the things we've tried to make clear is that writing for a digital platform as if *it was something else* is not going to get you very far. Digital books aren't novels, they have a set of structural affordances that physical books don't have. They mix, remix and mash text. They invite reading in an unconstrained order. They ask you to get up out of your chair and walk around. The thing you read on isn't a book anymore, so let's stop pretending that you're always going to regard it, to respond to it, the same way. It will make use of platforms in ways that a conventional book cannot. These might be subtle, hidden things, or they might foreground the whole narrative experience. Either way, if you're merging two (or more) media, what you're actually doing is allowing a hybrid form to emerge.

The best way to start might be to think about why nature makes hybrids. The simple answer is survival. A successful hybrid might be better equipped to propagate itself, ensuring the survival of a genus, carrying a parental strain of identity into a changed ecological scenario. It might be arise when one of the parent species is under

threat from changes in a natural habitat. Some of these are so successful that we stop thinking of them as new, or strange in any way. Grapefruit are hybrids, as is most bread wheat. Peppermint too. Killer Bees (yes, they're real) are hybrids. Not all hybrids are successful though. Nature does not always find a way (although, I am delighted to discover that a wholphin is a real thing).

If nature makes hybrids, humans make them too. We cross-fertilize plants to make hardier strains. We bred Killer Bees in the 1950s by cross breeding African and European Honey Bees in order to increase honey production. Leaving aside the fact that 26 swarms escaped (and have spread across the Americas since then), the simplicity of the idea is what you should focus on. To increase honey production. There was a single, identifiable aim, and that was what drove the project. To create a hybrid form for writing, adopt the same clarity.

What are you trying to achieve?

It should, we propose, be as simple as 'increasing honey production'. It has to be something - if it isn't, if you're merging two storytelling forms with no real idea as to why, then there's no more honey, there's only money being spent. The novel is perfectly fine where it is, thankyou. If you're determined to port it into a new platform, then that platform has to alter something, offer some way to tell the story that isn't possible in a conventional form. Otherwise the ghost of the book will manifest, clanking its chains in horror.

Hybridity, here, should also serve story. Make no mistake, if you're showing off the technology, telling the same thing in fully immersive VR without thinking about *what it does to the story* then you've wasted your time. After the oos and the aahs, when the dust settles and your audience think about what they experienced, they're going to talk about the platform and not the story. Let's see if this helps:

Tarkovsky is a hybrid writer.

There. That sentence has sat in my notes folder for this book since we drew up the first outline. I've been waiting to get to it, to make this argument, for weeks.

Tarkovsky is a deliberate filmmaker. He chooses, very carefully, what he wants to show us, and how he's going to show us those things he considers important. Especially, for the purpose of this essay, *Stalker* is an exercise in film as a hybrid form. The novel *Roadside Picnic* from which *Stalker* draws most of its scaffolding is not the film, that much is clear. At a formal level, *Roadside Picnic* is a set of chronologically sequenced narratives exploring the existence and nature of six *Zones* of extraterrestrial significance across the world. The novel is primarly concerned with the zone situated outside the town of Harmont (the precise location is not clear), and is constrcucted as four episodes in the life of a Stalker, Red Schuhart. The events of *Roadside Picnic* are echoed in *Stalker*, but Tarkovsky is concered with the formal qualities of film narrative as he sees them. An Aristotelean unity of:

- action (the story shoud contain one main action, with few (if any) subplots)
- time (the story takes place over no more than 24 hours)
- location (the story covers one physical space - no compression of geography)

is at work in the film, and absent from the novel. Tarkovsky is making film, not writing a novel, and he understands that we read film in a compressed, artifical space and time. As such, *Stalker* is not permitted the digressions in time and space afforded to the novel, which is a less linear object than his film. He's made a hybrid form by merging the book and his film, the point of which, Tarkovsky's 'make more honey' is the representation of an Aristotelean unity. His plot (summary stolen here from Geoff Dyer); a guide, or Stalker, takes two people, Writer and Professor, into a forbidden area called the Zone, at the heart of which is the Room, where your deepest wish will come true; is amongst the most direct ever made. Everything else in the film - be it the non-diagetic sound design, Tarkovsky's obsession with metaphysics, the history of the gulags, even the allusions to Christ, are all in service of that story and that unity of storytelling.

Writing a hybrid form is as simple as that. The rest, as they say, is blood, sweat and tears. The idea. Your 'make more honey'. Circumstance's *These Pages Fall Like Ash* (our physical/digital book hybrid) is about evoking and imagining another city alongside your own. What we

do with that is tied up in the way you read the piece - slipping between an unconventional wooden-bound book and a set of geographically specific narrative chunks delivered as you traverse your own city - but it is all about the other city, and the evocation happens in the space inside your head.

If this is all a little definitive, a little dictatorial, then take heart. The decisions you make about your hybrid will be new, because hybrids, by their nature, are new. They are a clash of forms, mediated through an idea.

Curating your reader

Okay, time to move on to something else, but before we go, a few thoughts.

What we've tried our best to demonstrate is that digital can be something different, that writing for digital asks new questions of you - as an author, a designer, an artist of any kind - and that taming the mutability of digital technology is key to all of this. For a medium that's ostensibly all about play; control and scaffolds are paramount.

What about the thing you really cannot control. We began this book with the following admission:

> We, the authors of this text, have no substantive idea how you are reading it.

We could have extended that to add that we have no idea who you are, either. We think you're creative. Interested in books, or experience design. We hope you have ambition, that you want to do interesting stuff with digital technology and books. We'd like it if some of you were writers. Publishers, editors. People involved in making ***stuff***.

But we *don't* know.

We can control certain things though. If we have this book printed, bound and distributed in bookshops, and you're reading this, then we know you have access to those. That you live in a town, a city, or somewhere that still has a high street. If we only make the same product available by mail order, to a specialist audience, then we can make other assumptions about you. If we chose a digital-only distribution system, then we can extend and change some of those affordances - of the book itself, and our readers. Craig Mod wrote one of the most insightful commentaries on this in 2011 - *Post-Artifact Books and Publishing* [1]- and it's fair to say that we've taken Mod's writing as a starting point any number of times in this book. Central to the argument in *Post-Artifact Books* is that the digital artifact is a scaffold between two states- a pre-artifact system in which texts are created in real-time, updated and modified in public; shared and commented upon; played even, and a post-artifact model in which that '*finished*' text is shared and owned and updated; iterated after the fact in just as real a time. The essay goes on to make a case for a robust platform, or set of frameworks, for annotating and extending the moment of reading a text, but for our purposes, let's come back to the idea that a digital artefact is a scaffold between those two states. Before it is complete, a digital experience (to classify in broader terms) is intention and form, content fighting for space and all, all potential. It embodies a state, as this chapter suggested earlier, of pre-reification, of promise without sure knowledge. After it

is *live*, after it becomes a *minumum viable product*, then it lives, it is experienced and all of that promise becomes realised. It becomes a sequence of moments in time, each mediated by their reader in a personal manner.

While making those moments is the primary concern of this book, this note wants to address what they do to readers.

If you think of the artefact, the experience, as a scaffold; something inherently temporary, then the task of curating readers might be (I have no idea what I'm going to write next and so I'm going to write something else and see if that helps)...

1. The essay is also available on Kindle. It's a couple of quid. Go and buy it and support good writing. ↩

The House of Leaves Memo

I met Mark Z Danielewski in 2014. He's charming, fiercely intelligent and a writer who's work I admire, even if I don't always find a connection to it. In 2001, he published his first novel (although it was published by Pantheon Books, the extent to which Danielewski was involved in the design and production of the book clarifies his imprimatur), House of Leaves, to which this short memo is directed.

Dear HoL. Dear Editors. Dear Johnny, Zampano and Will. Dear Pelafina.

It is periodically suggested, proposed even, that House of Leaves will be published as a digital text. An eBook of some sort. Almost certainly enhanced (about which more, later) and supplemented in some manner to offer value to the digitally-enabled reader, whose attention will otherwise slip away from pages bearing a facsimile of print to their social media feeds, their Facebooks and their Twitters, to their surroundings that cannot possibly be an armchair, or a sofa, because if digital surely frees us from anything, it is the abject misery of reading somewhere comfortable and safe, somewhere with tea, or strong coffee and a single light behind our heads, throwing shadows onto the page.

House of Leaves (you'll excuse me referring to you in the first person?) is book as artefact. It attends to the

idea of the book as Citizen Kane does to film, or Welles' War of the Worlds to radio drama. It embodies something unsayable, although I shall certainly attempt to say it here, and in doing so, renders itself perfectly unadaptable into any other medium. The thing about unsayable things though, is that they can say thing about what is not possible, by means of what is.

The limitations of e-text, as we currently encounter it, are those of process, and of related form. The eBook is a reproduction of the printed book; in that it arises from the same word-processed source, sometimes rendered through a page-layout software, sometimes not, but regardless; text unaltered from that which will be set, printed and bound. It is tied to the physicality of the book by a tangled skien of commercial opportunity and myopia. For most texts, regardless of their content, this is not an unideal scenario. A best-selling thriller, the motion of which is forward, always forward into the unknown and the solving of a case, or reconciling a body, is served well by an eBook edition. The clumsy rendition of page-turning on an eReader is a scant inconvenience to bear. For a book designer, the sudden replacement of typographic choices is galling, but not necessarily about to induce a fainting spell. Books, for the most part, are adaptable things. The form has survived for so long in part because of that adaptability, rather than in spite of it. Even the Kindle's facility for increasing typesize, offering a readable text without recourse to magnifying lenses

or powerful microscopes, doesn't dent the book's permanence, even in a digital form.

Then there is House of Leaves.

On the one hand, there is the sheer physicality of the book. I do not refer to its heft, or the shape and size of the object itself. Rather the manner in which it demands to be read. Buried inside those pages is a reminder of the potential every airport paperback has forgotten, or had lobotomised. The book is a thing, a thing to be turned and handled with care. That we have to shift the book around in our hands to read it is just one thing that will collapse under an iPad's auto-rotation 'feature'. We will be denied something fundamental to the book's content, unless we cripple some small, minor, but inherent function of the digital. Unless the construction of the digital edition attends to this; makes it a feature of the reading experience just as the footnotes and pacing are a feature of the print original. Then, of course, it's an app, not a book, because eBook file formats cannot accommodate textual play without rendering every page as an image file. Every single page. But is that important?

Paper is thin, and words require our full attention lest we miss something.

The first question that ought to be asked before attempting a transposition[I] of House of Leaves, is 'what is the book?'

The book is unease. It is the paranoia that sets in when you are sure there is something else in the house with you. It is invasion (I treasure the examination of the

Uncanny that House of Leaves contains. The origins of the term are accompanied and surrounded by an example - as if in situ - of the affect) and it is dread. That it is contained within 705 sequential pages only highlights this. A book offers escape, a place in which we can imagine and explore another life, another world. The escape offered by House of Leaves is not safe, or comforting. It crawls under the skin and it's trickery, the slippage between reality and fiction within those pages, is anything but a welcome escape. The formal qualities of its design, too, implicate this. Our relationship with a written text is comfortingly linear, is based on a knowledge that the book is limited by endpapers and cover, that it has been brought down somehow and confined. A book should not escape those pages and infect our imagination, demand to be held up to a mirror and deciphered. It should not be the subject of discussion forums as to what exactly is going on in there.

All of those things are possible, as this "book" (of which this memo is an excerpt) makes clear. They are possible, though, because those extra-textual elements have been designed into the work. They should not be possible within the conventions of a novel.

But here we are, and there they are, and now the question is: What might a digital edition of House of Leaves attempt to do with that?

Let us be clear. Where House of Leaves to be directly adapted into a new form, with every footnote, typographic trick, intertextual referent, typeface and layout com-

pletely intact then it will have failed. The nature of the book - as a book - is part of the power of the story. We don't read it so much as it allows us to glimpse something inside its pages. We make sense of what we can, and we search for the rest.

A transposition of House of Leaves has to start somewhere, though, and in the absence of the author, I offer this:

I have a folder on my laptop. It is called *'House Of Leaves Exploration #4'*. Honestly, I do not know where it came from, other than the sure knowledge that I downloaded it as a torrent file, and that this would have been sometime in the last 3 years (the age of this machine). The folder contains music files. A few I recognise from Poe's Haunted, the rest comprise readings from the book. Mark's voice is clearly identifiable, the rest are not. Female, male, old, young, American, Spanish. In English, in German. I had to Google it to find out what it is. In 2000, Mark Z Danielewski and Poe recorded an album's worth of experiments, using House of Leaves as the template (template isn't the right word, but it says something about the relationship of the book to these tracks). It isn't available commercially, as far as I can determine.

Which is a shame. It is raw, and fragmentary. It seems unfinished somehow, but nothing can deny the power of hearing voices read the text. Reading them in your ears, through headphones that cancel every other noise in the room. If House of Leaves is suggestively claustrophobic, this targets the amygdala directly.

—

A digital edition of House of Leaves might draw on that album, it might use sound to inform the layers of story. It might be something we haven't seen yet. It should not, I believe, be the same object that exists in all of those print editions, in colours and with strikeout text. Those have an audience, and they're very happy with their story (and I've seen the sales figures - for a book that's 15 years old this year, it's still shifting very nicely thankyou). The digital House is different, can be different. It can transpose what lurks at the heart of the House and make the uncanny new.

A suggestion as to where to begin:

A book is a confined space. It has covers, endpapers and signatures sewn inside. House of Leaves does things with those affordances, of course (always in service of the idea that the book is the House), but it never rejects the formal qualities of the book. A digital House of Leaves has no such affordances. It can **be** Navidson's house. Confined at the beginning, maybe only the a portion of the text is visible (Zampano's notes, for example, as Johnny finds them), expanding as it is read, as the House itself opens up. Remember too, that it can lie. A file that says it is 97 pages long might only *be* 97 pages long until it is read. Then it can start sprouting extra sections, commentaries and typography as much as it likes.

Digital is nothing if not dishonest.

Thank you for reading. Now, back to the book.

1. Applied deliberately here. If House of Leaves is unadaptable, without changing some fundamental aspect of the book, then a transposition is the most sensible course. ↩

Choose your structural grammar

My dad has regularly been going to the theatre for decades. He and a few of his friends have a subscription at Þjóðleikhúsið and, come rain, come shine, every few weeks they go to see whatever it is that they're staging. It doesn't matter if it's getting awful review, whether it's a farce or a tragedy, they go, watch, and then talk about it over wine. This tradition has survived two divorces and several major career changes.

Theatre has that effect on people (especially if you fancy yourself as a cultured middle-class citizen of the world). People get hooked on watching it. People get hooked on working in it. Theatre isn't a mainstream hobby activity but it's here to stay.

It is, arguably, the oldest form of storytelling that we still practice. (The other contender being music, although given how intertwined drama and music have been, the distinction is moot.)

Speak to any historian of cinema (especially the amateur ones) and you'll get a yarn about how early cinema

consisted just of a camera pointing at a stage: recorded plays that didn't use the medium to any sensible degree and that film didn't begin to advance until filmmakers began to break away from the conventions of the stage.

This narrative—even though it's demonstrably, completely, and utterly untrue—has become a standard trope in media commentary.

Right out of the gate, early cinema focused on spectacle, fantasy, and documentary works. Most of the stage adaptations come *after* the special effects and documentary films. The crude and stage-bound nature of early film has more to do with the limitations and immobility of the cameras than an over-bearing influence of drama on the filmmakers.

The story that film grew out of remediated stage plays is a fiction.

Even though it *is* a complete fiction, its message is a useful one: different media have varying qualities. This means that each medium lends itself more to doing some things over others. It's a McLuhanite parable—his pithy 'the medium is the message' aphorism writ large as a largely made up metaphor.

Which is all good. My only problem is that there's a better yarn we can use for this: the story of an earlier media evolution that has much stronger parallels to our current new media predicament.

Novels need print

The novel has a longer history than people expect. How long, exactly, is a bit more complicated to answer because then you have to start defining exactly what a novel is in terms of length, style, and structure.

We've clearly been telling stories in prose for millennia but even if we restrict ourselves to something more specifically novelistic in terms of structure and style then we're still talking about more than a thousand years.

(Who's with me on holding a party in 2021 celebrating the thousand year old birthday of the published novel?)

This is something we've clearly been doing for a while.

Despite this extended history, prose never really took off as a method for telling long stories. It dominated nonfiction, philosophy, and theological studies, sure, and it was the primary form of telling really short stories like fairy tales, fables, and ghost stories.

But when it came to telling longer interconnected stories poetry was what most storytellers reached for: Gilgamesh; Homer's Iliad and Odyssey; Ovid's Metamorphoses; Virgil's Aeneid; Beowulf; Poetic Edda; Dante's Divine Comedy; Ariosto's Orlando Furioso; Milton's Paradise Lost; Byron's Don Juan; Pushkin's Eugene Onegin.

Prose stories and novels existed but they have been in the storytelling minority for most of their history—even many of the exceptions relied heavily on poetry. Most of The Canterbury Tales are in verse. Even the Prose Edda was written and presented as a textbook for poets—it isn't strictly speaking intended to be a prose retelling of the Norse myths. It was a Christian-era explanation of norse myths so that contemporary poets could read and use the metaphors, idioms, and similes that were based on those old myths. Drama and poetry ruled the storytelling roost.

(On a tangental note: what the Prose Edda omits, elides, and adds is just as interesting as the retelling itself. If you compare the Poetic to the Prose Edda, it seems clear that Snorri Sturluson adjusted the myths a bit to suit the more Christian culture of his day. For example, you can read the Poetic Edda as saying that Freyja ruled over the armies of Valhalla with Odin—that she, as the viking feminine ideal, was a lot more warlike than the Christian retellings made her out to be. Make love AND war, instead of make love, not war. The idea that the viking goddess of love would be a passionate general appeals to me.)

It wasn't until moveable type became the norm that the novel began to make headway and even then poets like Byron and Pushkin dominated the scene with what were essentially novels in verse.

It isn't that printed poetry doesn't work. It does. It's that poetry isn't reliant on print, as a form it works just as well orally[^3] as it does printed.

Oral transmission coupled with the mnemonic aids of verse makes poetry less dependent on print for distribution and authorship.

But...

Novels needed print to thrive as a medium.

Print distribution put novel distribution and dissemination on an even level with poetry. But even with a more even playing field it took the novel many years to reach parity and then surpass poetry as the western world's primary form of written storytelling.

Would I do this again?

Back when I was a kid in gagnfræðaskóli (the Icelandic equivalent of high school, literally 'school for useful studies') a friend of mine, pressed for time, wrote a book review essay for school pretending that a AD&D roleplaying session of his was a fantasy novel.

His teacher had given the class the assignment to review a book of their own choice. He'd been too lazy to read something so he just gave the session a title and wrote a literary 'review' of it for the class. The teacher couldn't tell the difference and none of the kids blabbed.

Much ink (and many pixels) has been spilled on the issue of the role of storytelling in games. There's always been a narrative element to games but the use and importance of stories in games exploded in the late 20th century. Even without computer games, roleplaying games, board games with an explicit and important setting and back story, and choose-your-own-adventure books make the issue complicated enough on their own.

That a medium like games can accommodate and use narrative elements but not be dependent on them seems to break the brains of a lot of academics, despite the fact that this is the role that stories tend to play in at least two other historically important art forms:

- Poetry? Can use stories and story-like elements but doesn't need them as a form.
- Music? Ditto.

This complicates all attempts to define a theory of games. Is it a good game when you're just using the mechanics of the form to deliver a story? Is it a good game if the story is rubbish but does an excellent job of serving the gameplay? How many angels can dance on the head of a pin?

Asking if something is a good game or novel is only a useful question if you're an academic or an annoying snob. You can take that question and its siblings (such as *did this conform to the rules of its form as academics define them?*), put them in a box, and throw them in a particularly indigestive volcano. They don't help you create. They don't help you create.

The questions to ask are more along these lines:

- How did this affect me?
- Was the experience consistent?
- Did it play with or too my expectations in an interesting way?
- *Would I do this again?*

Anybody who has spent any time researching readers and players knows that these four qualities—effect, consistency, expectations, and repeatability—are what is important to them about works of art.

When it comes to deciding on a medium or genre as a creator, how those four qualities play out and support or don't support our goals and intentions is the single most important factor to consider.

Labels and roles

My great grandfather was a journalist, translator, politician, academic, poet, playwright, and a priest.

Not all at the same time but he multitasked more than you'd expect.

He was an interesting fellow—founding member of staff of the Icelandic National Broadcasting Service and in charge of their newsroom during the start of World War Two—but what's relevant to us today is that the list of the media he worked in roughly corresponds to the list of subjects and fields he worked in.

He didn't do journalism or news reportage as poetry or drama. He didn't deliver academic essays on Byron's work from the pulpit.

He did mix up some things. His poems were very political. His drama had religious overtones. But for the most part the various media were treating like sorting boxes: something from this field went into that box, a different field went into another.

He realised what a lot of creators today don't: some things only fit in some boxes.

Most of what's in people's head about writing and creating is romantic nonsense dominated by psychobabble ('the creative personality', 'artists have an irresistible urge to create') or mysticism ('the creative spirit'). Most

of those bullshit notions about art and creativity aren't compatible with thoughtful consideration of your actions. Beginning writers don't choose novel writing because it's the right choice for what they have to say. They don't even think about what it is they have to say in the first place.

I know because I've made all of those mistakes myself.

Despite the label, creative acts—storytelling in particular—tend begin with the creator just going with the defaults.

If you can write, the default is to write a novel. If you can draw, the default is to draw a comic book. If you have money and gullible friends, you make video.

Major upheavals in media, such as the shift from poetry to prose, or the current introduction of digital media, only happen because somebody began to choose something other than the default. It happened because, at some point, an storyteller looked at the stories they had to tell, then at the qualities of the various media at hand, and decided on using something less tried, less developed, and unexplored.

Neil Gaiman's *Sandman* includes a story called *A Game of You*. It's usually remarked as one of the least popular of the series. It's difficult, awkward where its predecessors (especially the piece that comes before; *Season of Mists*) are sly and clever. At its heart is a narrative about dreams, and the power of an internal fantasy life that might tell us things about the external world. It is al-

so an echo of a Jonathan Carroll novel; *Bones of the Moon*. Gaiman initially abandoned the story after reading Carroll's novel, finding the similarities too close to ignore. Carroll told him:

> Go to it, man. Ezra Pound said that every story has already been written. The purpose of a good writer is to write it new.

A Game of You is a cousin to *Bones of the Moon*. They share genetic material, a DNA of story, but each tells its tale in ways that only their chosen form can deal in. The grammar of a 24 page comic book, with monthly instalments, words and pictures in concert on a page, re-reading and visual connections, is markedly different to that of a novel. The two works are, as Gaiman suggests, born from 'two radio sets tuned to the same goofy channel', but what arises from that transmission is native to their form, each using the grammar of their medium with subtlety and grace.

This place. This point where you are looking around and poking your way through digital media. You don't get here without an essential curiosity—a compulsion to chip away at the unexplored and to wander into the dimly lit unknown.

The first step in that wandering is a decision to choose. Once you've made that decision, whether you end up going with the default or not doesn't matter, because you will have considered and weighed your options, instead of just being pulled along with the crowd.

More than one genre

One of the biggest mistakes you can do is simply lump all digital media into one and pretend that it's all the same thing. That's like pretending that all print books are alike and that the distinction between novels, short stories, journalism, poetry, and comics isn't meaningful.

Digital storytelling, once you've let it settle after shaking it up like a snow globe, tends to settle into two broad piles, each which can be subdivided into countless mini-piles.

The first pile, on your imaginary left, is games.

The second pile, on your imaginary right, is hypermedia.

There's a bit of indistinct sludge in between the two where you can't quite tell which pile it's in. That's okay. Crisp, paper-like boundaries are for print anyway.

Games are the more easily recognisable of the two. Not because there's more of them (in fact, there's less) but because they have a much clearer boundary. When you can't figure out whether a piece of storytelling is a game or hypermedia, that's because it isn't fitting the definitions coming out of the games field. Hypermedia doesn't care. Hypermedia loves everything and everybody. Possibly a little bit too much.

Games design is much too big a concept to be covered here. Like poetry and mechanised print, games predate digital by several millennia. Their principles, while benefiting enormously from digital, aren't dependent on it.

The 'hypermedia' that predates computers, on the other hand, works in ways that are fundamentally different from actual hypermedia. To pull that off in print, you'd need to be able to perform instantaneous transformation of matter.

Because it isn't the link, per se, that puts the 'hyper' in hypertext. It's the instantaneous and dynamic transformation of one text into another when you press the link that gives hypertext the oomph we associate with hyper media.

Think 'hyperspace' and you're on the right track.

The hypertext that you read and enjoy vastly outnumbers the games you play because hypertext is how the web and apps tell stories.

Almost everything we do on the web and in apps is storytelling.

Facebook's a story. Twitter's a story. Blogs are stories. Every website, every app, every chat platform, they're all hypertext and they are all stories.

That most of these are also conversations doesn't make them any less hypertextual because hypertext is fundamentally conversational. That's what linking and dynamically including texts in a variety of context does. It makes conversations. That's hypertext.

Even in a plain old web page, links are conversational. Unlike references, which are formal even at best of times, links can be witty, tragic, satirical, tongue-in-cheek, and laugh out loud funny, even when neither the linking or the linked text are any of these things. Simple things like linking from a person's name to the page in a medical dictionary for restless leg syndrome can be hilarious in the right context, even when the tone of both texts is serious and deadpan. That's hypertext.

Hilarious juxtapositions of tweets or Tumblr posts are a common enough phenomenon for it to become a regular trope on Twitter and Tumblr. That's hypertext.

Even ebooks are hypertext, if only by virtue of their reading context. Some of them are only accidental hypertexts, sticking to print conventions and ideas even as they have lost all meaning and sense in digital. Others, like this site you're reading, are written as hypertexts first, where links are used as one of the primary punctuation marks—more common than the m-dash, less pretentious than the semicolon.

This is not a book; this is hypertext.

Because this text was written with digital first in mind—unlike those print books which have been skinned and then re-coated with a digital gloss—this is a loose, conversational, and sprawling hypertext that might well eventually be bundled up and stuffed into print form like a set of clothes stomped into a suitcase while the taxi to the airport is waiting outside.

Which is fine. If I don't want you to criticise my preference for reading print books lifeless, skinned, and flattened into ebook form, I don't get to criticise you for preferring to read the ebook as a bleeding, severed appendage cut off from its network.

Games design is huge.

Lucky for us, there are a lot of books and websites covering the subject so we really don't have to do the form an injustice by covering it badly.

My personal favourites are:

- A Theory of Fun by Raph Koster.
- Lost Garden by Daniel Cook. A website that is a treasure trove of notes, ideas, theories, experiments, and examples on games design theory and practice.

There are more and I'll add them as I think of them.

Digital media of all kinds is built on a series of action feedback loops. You do something and the device gives you feedback on that action. It's the foundation of User Interface (UI) and User Experience (UX) design and the basis of everything we do in the field.

The core difference between the structural grammars of games and hypermedia is that in games the centre of meaning is in the action feedback loop but in hypermedia it is in the feedback loop's context.

This difference in grammars expresses itself as different kinds of structures. Games are a tightly interwoven structure of feedback loops: one loop leads directly into another and they build on each other like Lego™ blocks.

Sometimes that structure is hierarchical, i.e. levels of increasing difficulty and requiring increasingly complex actions: finish one to get to the next). Sometimes it is networked: e.g. a large space that you can explore where difficulty and complexity is distributed spatially.

In hypermedia, no matter whether it's Michael Joyce's Afternoon, A Story, Kottke's weblog, or Twitter in its entirety the centre of meaning is in the context: where you get to after you take the action. The action only has meaning insofar that it affects the context. The page or tweet you see is what says something, the link and following it only modifies it.

The popularity of game mechanics in user interface design complicates things but mostly because they are usually badly thought out and not that unique to games.

Some of the things labelled as game mechanics are merely good UX design practices, like having clear, dynamic, and immediate feedback loops throughout your app. Others, like using leaderboards and the like to foster competition and manipulate your users into dehumanising their fellow people and thinking of them as things to be beaten is a tactic long used by the managers of sales teams. It, and a lot of other 'game mechanics' are only really competition mechanics and aren't specific to games.

In the end, the 'is it a game or not?' question doesn't matter to us. While the distinction between the two is important when it comes to understanding the strengths of each, it's important also to understand that digital me-

dia (as well as a lot of non-digital media) can be more than one thing at the same time.

You can make a game that works just as well as just a story with all of the game's feedback loops dialled down to 'So Easy a Drooling Infant Could Do it'. You can make hypermedia, apps, and websites that can be played like games.

Absolutism doesn't work for digital. Often the answer to the questions you ask yourself as a creator will be 'both'.

This is what it feels like

I don't remember the first time I told a story. None of us do. It doesn't matter whether its genetic or learned, nature or nurture, storytelling is a basic human activity.

We only have two ways of teaching:

- A show-do loop. The teacher demonstrates. The student tries to do. Gets feedback from the teacher who my or may not show again. The student tries again. Repeat as necessary.
- Storytelling. The teacher encapsulates the showing, the doing, and the information needed to do, in a story.

Every teaching method or form is just a variation of one of those two, usually replacing the teacher or the storyteller with a technological proxy.

Games are strong on the former method: a feedback loop between showing and doing. Hypermedia is strong on the latter: even incomprehensible non-sequiturs are filled with narrative logic once you post them online, on the web, on Twitter, or on Facebook. The very context coopts *everything* that appears into telling a story.

In real life, how you teach isn't limited to just one method but usually a mix of the two depending on the subject, strengths of the teacher, and the abilities of the

student. The blurry line in digital media between games and hypertext is just a reflection of common practice.

What you teach isn't limited to skills or knowledge, although that's what we usually associate with teaching.

Sometimes what you teach is emotion. Feel the sting of murderous jealousy. Experience humbling shame. Understand the fear of death. Fall in, feel, and lose love.

This is what it feels like.

As teachers storytellers cannot just pour information into the heads of the listeners. They have to lead them to an understanding. It doesn't have to be exactly the way you understand it—we all start in different places—but it needs to be of a kind with your understanding. Emotions need the same build-up, practice, demonstration, and experience as any other thing you teach.

To be able to do that you need to understand your medium. You need to have at least made a conscious note about what you're doing. Choose your medium. You need to know how that medium is and has been used. It doesn't matter if your colleagues in that form aren't doing what you're doing, their techniques are relevant. Joe Sacco's Safe Area Gorazde, Marjane Satrapi's Persepolis, and Will Eisner's Contract With God are, respectively, journalism, autobiography, and fiction but they share a form of storytelling. It doesn't matter if you're doing a comic on cute cats, their methods are relevant to your work. Copy the way they do things. Try them for yourself. See what works for you and what doesn't.

The same applies to games designers and hypermedia authors. Don't limit yourself to the games or hypertext that are covering exactly the same subject as you are. The form is where the methods and the structure comes from. Copy ideas from apps, websites, and games.

Choose your structural grammar. Study it. Practice it. Repeat as necessary.

Serial Fiction

The Right Sort

Mum doesn't notice that I nick the odd pill. Valium's like my power pill, from Pac-Man. I get nervous too. I took a pill before we left.

The pill's just kicking in now. Valium breaks down the world into bite-sized sentences. Like this one. All lined up. Munch-munch.

Valium or no Valium, when the dog barks I nearly shit myself and my lungs fill with dark and my blood fills with a scream—

Black Box

People rarely look the way you expect them to, even when you've seen pictures.

The first thirty seconds in a person's presence are the most important.

If you're having trouble perceiving and projecting, focus on projecting.

Necessary ingredients for a successful projection: giggles; bare legs; shyness.

The goal is to be both irresistible and invisible.

When you succeed, a certain sharpness will go out of his eyes.

Jeff Noon

1/4) Somewhere my phone is ringing. I search my pockets, the sofa, the table, cupboards, under the sheets on the bed, inside the fridge...

2/4) Under floorboards, inside the wall cavities, the back of the stove. It's still ringing. I look through filing cabinets, bookshelves...

3/4) In the oven, microwave, fireplace. The trash. I take the back off the television: nothing. But it's still ringing. And then, finally...

4/4) After fifty minutes have passed, I find my phone in a plant pot, buried in the soil. And I answer it. "Yes? Hello?" It's still ringing.

The first of these is from David Mitchell's '*The Right Sort*', the second, Jennifer Egan's '*Black Box*', the third from Jeff Noon. These works are not presented to suggest that Mitchell, Egan and Noon are the only writers working with forms of serial fiction (facilitated in these instances by Twitter). While we're here, Joanne Harris is brilliant, Teju Cole evokes the specifics of place and time in 140 characters like nobody else. These three are there because they each have something to show about how reading and writing can be mediated by digital serial fiction.

First of all though, here's a warning. If you've ever commented in the Guardian and pointed out how passé this is, or asked rhetorical questions online as to the point of writing in Twitter, then click here (next chapter). This bit isn't for you. We think serial storytelling has something to offer, something to say, and so let's not waste your time by asking you read it.

We read social media. Visually to textually. In combinations of media, and as a stream. We read it in situ, and out of context. We read *storify*-ed versions of events, in which we appear briefly, blinking in the headlights, before the record of the conversation moves on. We see things moderated, and as streams of data. We move through information and some of it, some of the aggregation of novelty, the consensual hallucination, strikes us as interesting.

Our attention lingers.

Each of the three examples above was chosen because it does something with the nature of serial storytelling and short, social media-stream updates. David Mitchell's *The Right Sort*, conceived as a way to garner interest in Mitchell's *The Bone Clocks*, was serialised over a few days in July 2014. Comprising a short episode taking place over a few hours in the 1970s (but set in the same fictional universe as *The Bone Clocks)* and told over 280 tweets, the piece is constructed as a very short story broken into tiny pieces. At the time, Mitchell described writing in Twitter as a '*diabolical treble-strapped textual straitjacket*', suggesting that the confines of 140 character bursts of content did not make for comfortable writing. Of interest in terms of form and content though, is the use Mitchell made of Twitter's brevity. His narrator - Nathan - is in the habit of stealing his mother's Valium for a quick high, and while in an altered state, is prone to short, abstracted descriptions of the world. As quoted above, '*Valium breaks down the world into bite-sized sentences. Like this one*' also displays a meta-awareness of the form in which it is read. An out of body experience commenting on the form of the tale's telling. *The Right Sort* is too close to a short story in structure to tell us anything useful about serial fiction and twitter, but Mitchell's use of the form does suggest a degree of native understanding. *Black Box* is the most formally ambitious of the three. Egan crafts something disturbing, complete.

Jeff Noon uses Twitter as most of the rest of us use air. He breathes it in, and exhales something utterly 'oth-

er' as a byproduct of his being in the world. Noon is a prose stylist,

A Literature of Ambience, or Ambient Literature?

This is chapter 1
We look up from our phones and then both move to opposite sides of the archway.
We lean our backs against the old wooden doors so that we are facing each other.
We look at each other for a moment.
People pass between us, but they don't notice us, we're invisible, our faces don't register.

You stay exactly where you are.
We look at each other.
This voice is not my own,
but for now it will speak for me

You pay attention to what I'm wearing, to how I'm standing.
There are no irrelevant details.
We won't be together all the time on this walk,
so you need to remember me.
I'm trying to tell you something without words.
Can you see what I'm saying?

I'm standing under the arch of Temple Bar, in London, at the edge of Paternoster Square. St Paul's Cathedral lifts into the sky behind me, and I'm not alone. I'm wearing a pair of headphones, which are attached to my phone. Music, and the narration above, is playing through them and I'm not in London in 2015, I'm somewhere else. I've been transported, slipped out of the bustle of the capital and my partner and I are in a shared space, mediated by the technology in our pockets and the sound in our ears. We stare at each other, lock eyes, and as instructed by the voice in our heads, one of us walks away.

We have spent a great deal of time so far thinking about what digital technology does to books. How it can affect the way we write, create and design, and what experiencing fiction through a digital lens might be. For a short time, we'd like to turn the lens outward and ask a different question:

What impact does exterior space have on writing?

We cannot ignore the presence of pervasive technology in this, okay, emerging field. We carry around little devices that connect us to a digital world. We're networked into a wider system, and in addition to linking us and situating our presence (the simplest example is GPS location), it affords us the opportunity to interrupt our experience - to record by photograph, by film and by audio, and have those interruptions become part of our daily experience. We share our photographs, our tweets and our tiny fragments of the world. All from a device smaller than a deck of playing cards. Thinner too.

The example that introduces this section is taken from the opening of *a Hollow Body*. Commissioned by the Museum of London to accompany their Sherlock Holmes exhibition in 2014/15, it takes the form of an audio journey through London, taking in the borders of the City of London, Cheapside, Smithfield and Barbican. *a Hollow Body* announces itself as a cinematic experience, a soundtrack for the city. *Imagine walking through a film where you are the main characters; the streets and narrow alleys of London acting as your cinematic backdrop.* the language used to situate each participant is deliberately immersive and participatory, but also acknowledges the role of place in the narrative. Each pair of participants walk a predetermined route through the city. Sometimes together, sometimes alone, and always accompanied by narration and instruction, by a situated response to the world around them.

It's useful to think of the writing process here as a set of tools. There are more than we're proposing, and those additions are going to be very specific to *where* your reader is, but here's a set of starting points:

- Space
- Architecture
- Maps
- What can distract
- Audio
- Writing

Finally, to return to the title of this short section. *A Literature of Ambience, or Ambient Literature?* Any emergent field - as Ambient Literature surely has to be - is going to be difficult to pin down in terms of exemplars, of works we can point to. Literature that addresses or makes use of the ambient though, is not in short supply. We'd like to draw your attention to a few starting points if you want to read further:

Teju Cole's *Open City*.

Robert MacFarlane's *The Old Ways* and *Landmarks*.

Iain Sinclair's *London Orbital*, *Lights out for the Territory* and *Slow Chocolate Autopsy*.

WG Sebald's *Rings of Saturn*, and *Austerlitz*.

Janet Cardiff's work can be found here.

Circumstance's work can be found here.

- *Liminal spaces*. The evidence of being there. Principles. Things and non-things. Finding the edges. Distraction.

Space

Moving through a space requires we be aware of the nature of that environment. It demands that the walker be conscious of hazards, of the difference between an alleyway at dusk and an open square in the middle of the day. Most of these are subconscious knowledges; we don't think about them in our day-to-day experience until they impact on our experience.

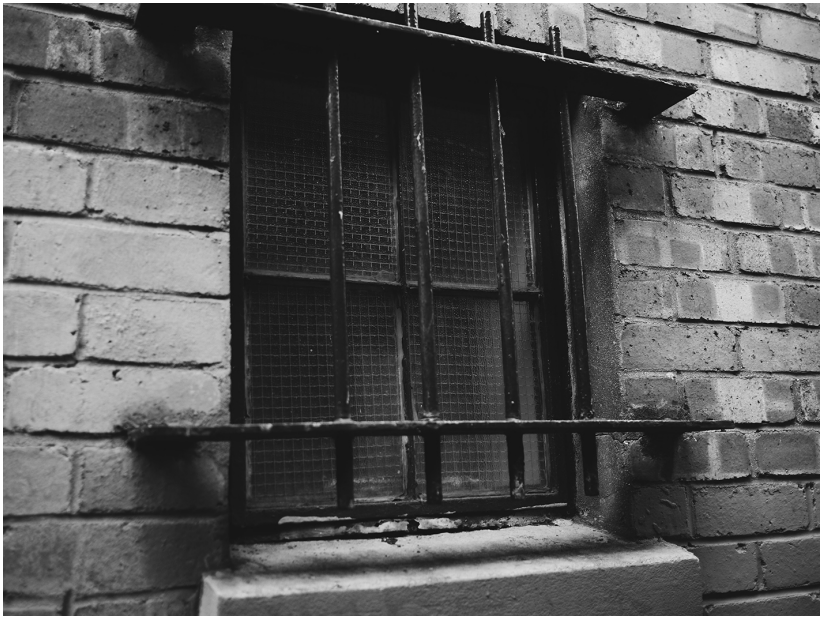
For a writer, they're the difference between a long and a short chapter. They're tension and reflection, pace and flow. Walk routes, listen and watch. Make notes and record the noise around you as you travel. Your reflections, your thoughts and the things you feel as you travel.

While your readers might not make the same observations, they'll be aware of the shifts in their surroundings, in the way the space makes them tense, or draw breath.

They will be you, in due course, and you need to be them now.

Architecture

Look up. Look around you. Look at every facade, and each piece of decoration, each tiny detail. Now ignore them. Instead, focus on the shapes of the buildings in front of you, behind and around you. What are they made of? Why are they built the way they are? What's their history, their purpose. How do you get inside? Is there a single door, or a double. Revolving? Security? What does that tell you about what's inside. What about the doorway; does anyone sleep in it? If so, is there a trace of them the next day? What is the pavement made of? The road?



Stanley Kubrick had his nephew, Manuel Harlan, document an entire road for pre-production on *Eyes Wide Shut*, stitching photographs together into a 6-meter-long recreation of space in order that his uncle could decide on camera movements. You don't need to be *quite* that obsessive, but you do need to look.

Maps

A map is not a plan of city streets, with markers for churches, post offices and traffic signals. It can be that, of course, but your map is a space is personal. It's a collection of smells and sights and sounds that's triggered every time you re-enter that space, or go somewhere like it.

Each one of your readers has their own map, their own shorthand for streets, plazas, rivers, and they have gps maps to find their way there in the first place. What the relationship between their map, yours and the journey they're going to make is we can't tell you, but we'd suggest it'll be more trigger-led than co-ordinates.

What can distract

Nothing, and everything, on a spectral scale. It really depends on how closely you mask the world (also see *audio*, below). There's nothing wrong in designing something that operates as a heritage tour - directing the reader's attention to things, explaining them and focusing them exactly where you want them to be, but it's like being inside an Occulus Rift - suffocating, with an absence of peripheral vision, and no awareness of the real stuff around you. If you want to write VR, then write VR.

The value in digital's relationship to reality is that it can abstract it away as needed. It can draw the eye (or the ear, or the hand) in as required, and bring everything down to the detail of a chalk mark on a wall, and it can zoom back out to the whole panorama. Weather is going to distract, but since that's a given, we'd suggest you ignore it. The time of day is your friend though - the same piece experienced in daylight and at dusk might as well be in two completely different locales.

Audio

Almost finally; sound. The simplest form of immersion, and potentially the most effective. Sound - delivered through headphones or played by speakers that interrupt the wild track of the city - directs the attention like no other medium in this field. Video is invasive, and obscures with an obvious frame (we'll amend this chapter when GoogleGlass II is available, and works, and doesn't make you look like a dork), and sound operates in 360 degrees, not a 20/20 field. Binaural sound spatially transcends stereo, allowing a writer/designer the opportunity to create a genuinely immersed experience.

Circumstance write with sound - we begin sketching our pieces with short fragments of audio that establish a mood, amending and amended by the impact of space and the journey (even as bare, non-specific points to cross through), that then provide a scaffold to rebuild the audio for the final piece. We return to those sketches for new works, or reinvent them with fresh arrangements that better suit the genre and tone we're aiming for, but it's sound that starts and ends a process.

Writing

The ubiquity of digital media shouldn't be taken to mean that always-on is a problem, or that your job is to shut out the world around the reader in order that they only focus on the thing you're showing them. Since the world is there, isn't it more productive to focus the reader's attention out - to the city around them in all it's complexity, but mediated by the story you're taking them through? You cannot shut the world out; it won't let you.

Liminal spaces.

That this kind of work relies on 'being there' is pretty evident. Like *a Hollow Body*, most works that are sited in a specific place are drawn with that location in mind. As such, they afford a writer a certain control over the reader's experience of the text, while simultaneously embracing the possibility of distraction and the noise (both auditory and visual) of the world. The reader is situated somewhere in-between reading and experiencing, between the world and the story. They're liminal.

What might be useful while describing the principles by which this work operates, is to start with Malcolm McCullough's '*Ambient Commons*'.

McCullough's text is concerned with the nature of ambience in media; in broader culture; and he does a fine job of exploring the nature of attention and the way that we interact with our surroundings. *Ambient Commons* isn't an answer to 'how to write ambient literature', but it shines a light on it, illuminating a decent proportion of the landscape [1]. Mapping is an exercise in analogy, a process of translation that asks the cartographer to situate themselves at a remove from what's real, and to render it somehow abstract, somehow readable, and that landscape is rendered defined as a result of McCullough's, and in turn our own, attention.

> We tune our mental radios to the precise frequency of ambience, and we listen for a while.

McCullough provides a set of notes early in the book. Twelve ways to describe the ambient. Here's one: >That which surrounds, but does not distract...

Attention, and the manner in which we read in a public place (assume for a moment that ambient literature might also be literature that by it's nature is read or experienced in a physical, public space. It might not be, but let's assume so for a moment) is important then. There's something enveloping about that phrase, reminiscent of the nature of signs in architecture, and the design of streets and walkways. The ways in which the environment is planned and used, and also not-used or suggested, offering us a space in which to be ourselves.

And another:

> An environment replete with non-things...

Which leads neatly on from the first. Here's a question though: If we're listening, and paying attention, what do we miss? Which fragments are overlooked in favour of the obvious or the essential. If I'm crossing a busy road, then my focus is no longer on the world as it might be, but as it is. Those non-things that we're absorbed in, that we're calling attention to, are gone, only to reappear in the world a few steps later. Where they went during their absence is a mystery, we only know that we're safe again and they're back.

And one more, for now:

A persistent layer of messages for somebody else....

We invade literature. We impose ourselves into a relationship between writer and text. We, as readers, are interlopers. Well, maybe. We do pick at stories though, we want to find them in the detritus of the world. It's rare that a book is written expressly for you to read. It's author might have an ideal reader in mind, but the odds of you being them are pretty long. But we read, and we continue to seek out stories. We're leaning over the shoulder of another, reading words meant for someone else.

Those examples aren't liminal. We're trying to describe something without saying what it is. Blind men feeling their way around an elephant.

But in asking what use liminality might be to this field, the first question that came to mind was this:

How do we know that we're operating on the edge of something?

Several answers immediately present themselves: - When there's a sheer drop to one side of your feet. - When there's a wall in front of you. - When the lights go out - When there's an evident change in our surroundings.

Each of which signals two things – the presence of a body (physicality is significant to ambience) and an immediate change in some aspect of the surrounding space. A change that requires us to employ a new sense or, pos-

sibly more usefully, to augment an existing one. If there's a sheer drop to one side (the edge of a cliff, for example) then as much as our forward progress is unimpeded by its presence, we're more than usually aware of the space to our right and left. The rules change. If the lights go out, then we have to pay attention differently. We might turn a torch on (which suggests a McLuhanite technology-as-extension), or we might change our mode of attention. Sound becomes more important, tells us more about the space around us than it was previously permitted to do.

If we're listening more acutely (or seeing, or touching), then its probable that we're diverting energy from another sense in order to augment a primary channel. We're focusing.

There's a change in the nature of our distraction.

Harnessing that change, and before that, appreciating it, is key to writing for space and for site-responsive work. For example, if your reader is unhindered by a controlled accompaniment (music, narration) then what you have is their presence, and the momentum of the journey to move the narrative forward. What you add to that, how you use their environment, is the dressing on the scaffold; the flesh on the bones of a fiction.

1. The danger of mapping any landscape is that eventually your focus becomes so fine, so acute, that you mistake the map for the territory, and here's a moment for Borges: '*In time, those Unconscionable Maps no longer satisfied, and the Cartographers Guild drew a*

Map of the Empire whose size was that of the Empire, coinciding point for point with it' ('On Exactitude in Science'), and then you've crossed a particularly providential and awkward rubicon. ↩

Writing a Fugue

This bit is dangerous. Not because it's going to explode, or subvert reality in interesting ways, but because I'm not a musician, I don't write music, and my formal education in that regard stopped around age 14. I can play the first four bars of the Star Wars theme on the piano and harmonica, so something obviously stuck.

The problem with so much Transmedia work, as we've suggested elsewhere, is abundance. An explosion of content with little sense of structure or control over the manner of storytelling. One of the things that Transmedia is missing is a grammar; a formal set of patterns for writing, for thinking about plot and character and delivery. Please note that I wrote patterns, and not pattern. There isn't one way of doing this, any more than there's one way to write a film, or a novel. But there are, or there should be, structures and guides. Scaffolds and defaults.

Fugues

A fugue[1] is a polyphonic musical form. Polyphonic meaning two or more simultaneous lines of (in this case)

melody. Fugue arises from the Latin *fuga*, meaning to chase, to flee. Fugues begin with a theme called a *subject*, presented in turn by each voice (or instrument), successively up or down a key. Just to complicate matters, if a second voice is an exact transposition of the first, then the Fugue is regarded as real, or modified, in which case it is tonal. What happens as each voice comes in to play, is a melodic shape that alters in form as it grows, until a *countersubject* emerges as an accompaniment to the subject, complicating the structure.

With me so far?

What happens next is that the composition alternates sections when the *subject* is present with sections where it is not. These are called *divertimenti*, and their function is to modulate to different keys, so to elaborate and counter the central theme over a series of sections. Within these techniques, the duration of notes can be halved, doubled, retrograde (played backwards) and inverted (played upside down). Toward the end, a section - *stretto* - emerges in which the *subject* is audible through overlapping voices, each one not waiting for the previous to complete, and so building toward a complex, interconnected whole that has to be heard, to be read as such to be enjoyed. What is also critical is that the original *subject* has to be strong enough to be stacked upon itself and expanded, compressed and elaborated, while still being distinctive.

That's how you write a Fugue.

It abides by a complex set of rules and conventions, which are designed to allow the *subject* to be heard through the (apparent) chaos. To emerge from a polyphony of voices because each one of those voices is carefully constructed in order to complement, accompany, elaborate or divert from the centre. All the while knowing that the end goal is a designed conclusion.

I work with an artists' collective called Circumstance. Our work gets a disproportionate amount of attention here, because I know it very well. We don't set out to make Transmedia projects, but some of our work falls into that category through critique, or misplaced marketing. We generally make work in public spaces with audio played through headphones or mobile speakers. It's cinematic, in that each participant is placed within a narrative that is situated in a space, and builds toward a conclusion. They're also hearing music, which adds to the sense of cinema. We start with music when we're writing. Short pieces written to evoke space, or mood, which are then employed while we test and develop, gradually becoming the *subject* of the piece in a manner not unlike a Fugue. It's fair to say we work backward and from the side in relation to the way I've described a Fugue being written - we generally don't have such a defined idea of the musical *subject* being foregrounded at the outset.

What strikes me though, is that writing, or thinking about writing, a Fugue is a good model to use when approaching Transmedia work. The *subject* - the central, driving idea, has to be strong enough to be lost in voices,

and then found again. It has to be robust and clear enough to survive a potential cacophony. Each character, each platform in a Transmedia piece is a first-person voice. They speak in their own way, dictated by the parameters and grammar of the platform they're being transmitted through. Those voices should, in the grand scheme of things, exist for a reason. If it were a novel, then they might be there to offer an authorial glimpse into another side of the narrative, or to comment on the story. It's a Transmedia piece though, so they are going to be used sparingly, and for effect. Over time, once the story begins to establish itself, they become a counter-subject to the main theme. They provide depth in the world. They're there to be trusted, or not. To be an echo of things we cannot see in the present. Fragments of surveillance to be studied and interrogated. Regardless, in their sparing way, they are there to make us think about the subject.

Transmedia is usually *tonal*.

It shouldn't be forgotten that the player/reader is a voice too. If they have agency (or the illusion of it), then they're probably *divertimenti*, modulating against the subject and moving the story into different keys. They might not though, and the *subject* can be the reader themselves.

Transmedia works well when it has an end in sight. It's just another form of storytelling, after all, and has an end in sight. What tends to happen though, is even if the first act is beautifully established, the middle sprawls and the end is rushed, appearing out of nowhere because our

time is up. This is where halving, doubling, reflecting and inverting the *subject* plays off. So much Transmedia work - so much digital work in general - is in thrall to the adventure game syndrome of having to find every clue, mechanically, in order that the end make sense. Remove the mechanical and work with the subject. Show us the tone, and immerse us in music, don't require us to understand every little thing.

Like as not we won't.

No-one aside from the writer will, and if that's essential for a satisfactory conclusion, then you have a problem. Far better to impart a sense of momentum, to show and envelop through characters with purpose.

Good fugues work with repeat listening. A single line of music turns into a complex texture, but exactly when the trick was pulled is often only evident the third time we hear the whole piece. We recognise the successive moments the *subject* appears, noticing layers of counterpoint and imitation, and sometimes the *subject* is hidden so cleverly, transformed and inverted so subtly that it can take years to notice.

Speaking personally, might that be a more laudable aim than solving a puzzle every fifteen minutes?

1. I am indebted to the University of San Francisco's Professor of Music, Alexandra Amati-Camperi, who's 'What is a Fugue' was, frankly, where I made sense of this section: http://www.sfbach.org/what-fugue ↩

This is not a disruption

From the perspective of a creator, writer, or artist, it does not matter whether Clayton Christensen's theory of Disruptive Innovation is true or not. It doesn't matter if it can be tested. There is little point in debating its flaws. It is a theory of business and management with little bearing on the practice of storytelling. It isn't nearly as all-encompassing as the cult of Silicon Valley would have us believe. The phrase "Disruptive Innovation" has become a shibboleth—the code word that tells us whether you are with us or against us. Debates on the theory are nothing more than the clubs and claws of warring paradigms and will net us nothing but pain and conflict.

What publishing and media are going through is not a disruption but a paradigm shift. It may or may not be accompanied by Disruptive Innovations™ but even if it is, the paradigm shift is purely in terms of our practice and how we see our practice. Akin to a religion, each paradigm is a worldview, conceptual framework, and theory of practice all wrapped into one. Switching from one to another is not achieved through reason and debate but through revelation and apostasy. The business implica-

tions of media a networked society are orthogonal to the practice of storytelling in a networked society.

This isn't a question of changing your mind but of feeling your old god die in your heart as it is strangled by the new god. You can sometimes change a person's mind but a wholesale transformation of a worldview is a place people have to walk to themselves. You can only arrive at an apostasy on your own, you can't be brought there.

Faith abides and is not subject to reason. Shattering faith to replace it is always an act of violence, even when it is self-inflicted.

The Print Paradigm

> When, in the development of a natural science, an individual or group first produces a synthesis able to attract most of the next generation's practitioners, the older schools gradually disappear. In part their disappearance is caused by their members' conversion to the new paradigm. But there are always some men who cling to one or another of the older views, and they are simply read out of the profession, which thereafter ignores their work. (Thomas S. Kuhn, The Structure of Scientific Revolutions)

The Print Paradigm explained the environment of printed media to near perfection. Stories, books, and articles were written by writers. If they didn't have a relationship with a publisher then they had to go through an acquisition process, their work stacking up in slush piles and on the desks of agents where they were manually sifted through and read. Few proceeded to the next step and only few of those who did proceed built that success into a relationship that let them bypass the pile on the next go around.

The work was then prepared by skilled professionals—editors, proofreaders, and the like—all of them using standard office equipment. First typewriters, then

word processors, then computers running word processing software—and always print manuscripts. Expertise and strategy lay in hard-earned skill.

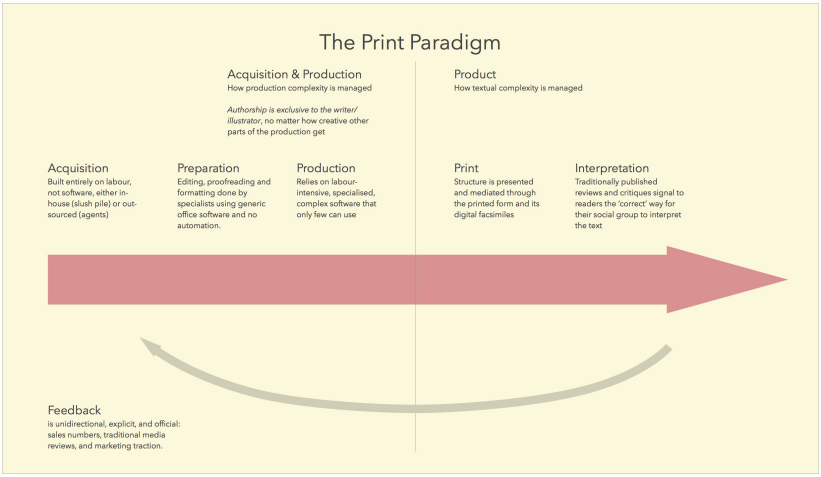
Design and typesetting was a highly skilled, labour-intensive process that required expensive, specialised tools and often a close collaboration with a printer. Even when desktop typesetting software appeared in the eighties, they were expensive, complex, and required specialisation—years of practice—to use.

Print was a capital intensive process—large-scale facilities with big, expensive machines. Distribution required a nationwide, later global, network of vehicles and manpower.

Even interpretation and feedback was structured and ordered. Traditionally published reviews and critiques signalled the 'proper' ways to interpret texts and events. Even when the public was heard, their letters were selected and filtered by the industry before they were published.

The print paradigm *was* perfect for its set of problems and the era it dominated.

> To be accepted as a paradigm, a theory must seem better than its competitors, but it need not, and in fact never does, explain all the facts with which it can be confronted. (Thomas S. Kuhn, The Structure of Scientific Revolutions)



If the above is your reality—if this is the world you inhabit—then you are in serious trouble because the print paradigm is dying. It doesn't provide the speed and responsiveness that your customers demand. It isn't capable of adapting to the problems that you and your customers are facing.

For better or for worse, networked media—the web and apps—now have primacy over other media. The print worldview is dead. Not the printed book, of course. The book has been around for centuries and will be here for centuries to come. What is dead is the print worldview—its paradigm—because the practices and concepts of the print paradigm are inadequate to the problems of the networked era.

The print ecosystem and its production processes are in a decline because they have ceased to help us and instead hinder us in our practice. Printed matter now exists within a larger media environment and that new environ-

ment requires a theory of practice that encompasses both print and digital.

Everything is digital – the network and the shared media environment

> Paradigms gain their status because they are more successful than their competitors in solving a few problems that the group of practitioners has come to recognize as acute. To be more successful is not, however, to be either completely successful with a single problem or notably successful with any large number. The success of a paradigm—whether Aristotle's analysis of motion, Ptolemy's computations of planetary position, Lavoisier's application of the balance, or Maxwell's mathematization of the electromagnetic field—is at the start largely a promise of success discoverable in selected and still incomplete examples. (Thomas S. Kuhn, The Structure of Scientific Revolutions)

Digital isn't a part of the traditional print environment—it lies adjacent to print, surrounds, frames and comments on it, but it isn't a part of it.

But, *print is a part of the digital environment*.

The separation between the two is entirely a construct of the print ecosystem. When you sit in the print worldview, websites look like something amorphous—form without either form or a business model. It

doesn't just look shapeless and disorganised, most of it *literally* just looks like noise to print people: meaningless and random.

When you sit in the networked media worldview, what you see is fluidity and meaningful change. Instead of explicit structure you have explicit connections that imply structure. It isn't amorphous but loosely coupled and, yes, a little bit messy.

(From this perspective the print world looks stiff, unyielding, and full of meaningless busy-work so incomprehension of the other paradigm very much goes both ways.)

Because the networked worldview is all about loose coupling and adaptation to changing environments, print is a first class citizen. Print books can be made that only make sense in a networked context. Websites can be made that only make sense if you have a print book. Print books can interoperate with digital through scanning or even simple references. Print meaning can become a part of digital meaning as photographed pages or as contextual discussion. Books can be designed and created through a process that is fundamentally web-based. It is the default behaviour of objects in a network to make connections whether they are physical objects or virtual or virtual representations of physical object acting as a proxy for the material form.

The network's trump card is the fact that its worldview offers a clearer path towards solving the problems facing modern book production, both print and digital.

From the print perspective each format has to go through an expensive and involved production pipeline. It doesn't matter if its a hardcover, paperback, or an ebook, they all have to pass through the same sort of error-prone, inflexible, and slow pipeline: Editing → Design → Typesetting → Proofing → Distribution.

(It's error-prone because it tries to catch all errors in advance, which is impossible, but at the same time its extended production pipeline makes every error catastrophic and unfixable. The print pipeline magnifies errors.)

From the networked perspective all representation is dynamic and all content is fluid. Removing the adaptability of digital media without giving something in return is an act of violence, not just towards the piece of content itself, but towards *the reader*. Baking a website into a static digital file that only works on tablets is an act of violence towards readers who don't have tablets or have needs that don't conform to the expectations you baked into the fixed layout ebook.

Conversely, rendering a dynamic work into printed form isn't an act of violence, provided that it was a part of the work's design, because you get something artful in return: a crafted object.

Some dynamic works don't lend themselves to linearity, like hypertexts, but it's a less of an act of violence to turn them into print than into ebooks. Print is simultaneously a medium, furniture, and a souvenir. It has value beyond its content while ebooks are a barely adequate de-

livery system for content with little value in and of themselves. Print's inherent value partially makes up for the violence of forcing linearity on non-linearity, especially when you consider that print enables more non-linearity than ebooks. Flipping back and forth in a book is easier in print and less confusing than in current ebooks.

The art of the book as an object becomes *more* important in the networked world, not less, because that's the role it plays in the larger networked picture—the value it brings to the table. Print is the souvenir—abstract ideas turned into display and furniture. It becomes a way of turning the implicit and unreal into something concrete and, yes, decorative.

Print production in the networked worldview is an iterative and fluid process, more like sketching than the industrialised process of the print worldview. Print-ready PDFs can be rendered at every stage of writing, editing, and proofing. You can order one-off copies of your book on a whim using services like Blurb and you can order those copies *whenever you want*, without asking anybody permission. It's all just between you and your credit card issuer. If you've self-published an ebook you can order a single hardcover copy to give to your non-digital grandmother—provided you've used tools built in the networked worldview where both an ebook and a print-ready PDF is only a button press away.

Or you could do what me and my sister did and create a one-off coffee table book about your grandmother's life and give it to her for her birthday.

> In the interim, however, during the period when the paradigm is successful, the profession will have solved problems that its members could scarcely have imagined and would never have undertaken without commitment to the paradigm. And at least part of that achievement always proves to be permanent. (Thomas S. Kuhn, The Structure of Scientific Revolutions)

The print worldview dismisses the network's intrusions into print as being of a lower quality than what the print worldview's processes create.

But they are lying to themselves when they make that comparison because they are comparing on the one hand their process which is built on hard-earned, expensive, and rare expertise—people who can do this work well are few and their rates are high—and the digital process which is admittedly mediocre but is *consistently* mediocre and predictable and, as time goes by, needs less and less skill to operate. (That's provided you are doing it right, which a lot of people aren't.)

Expert typesetting varies because experts vary. For every master designer you have a dozen rubbish InDesign operators churning out PDFs that make PrinceXML's output look like bloody Robert Bringhurst.

The networked worldview is already better at solving the problems print is facing than the print worldview itself. The network has much greater untapped resources for solving what so far has looked unsolvable.

A stillborn hybrid – the ebook 'killer bee' born of two paradigms

(The lies are an attempt to pander to a dead paradigm which can never work. The frustration in this section comes from the paradigm clash. Needs a rewrite.)

We lie to you. Not the 'we' as in the authors of this book-like object, but the 'we' who make up the modern day class of haruspex and seers: advisors, consultants, pundits, academics, and trainers. We lie to you by wrapping up what we think to be true into neat little stories, each of which has the sound and smell of reasoning without the actual taste or meat of a structured, logical argument. We lie to you because you have demonstrated time and time again that the reason why you ask an expert is that you simply aren't interested in understanding what's actually going on. We lie to you by omitting important context because we labour under the delusion that skipping years of study will somehow make the issues *more* comprehensible to you, not less.

You... You want canned truth—easily opened and delivered, pre-digested so that you don't have to think about it—because you think knowledge and understanding is a liquid thing that can be poured from one container to another.

Most of all, because we need you to listen and pay attention to what we say, we lie to you by telling you what you want to hear.

We lie to you because it's the only way to get you to listen, because we know you'll *never* change your mind, and because it's the only way to get things done.

Calling the various digital storytelling forms 'hybrids' is one such lie, albeit one of omission. It's a useful lie for useful idiots. It's been an essential touchstone concept for those of us who have been trying to work in traditional media—trying to arbitrate between the two paradigms. All at once it implies a blend of two forms—an attempt to get the best of both—a fidelity with the past, a marriage of equals, while still implying something uniquely new. It's a way of getting the terrified and closed-minded to work on something terrifying and open. Scared people reacting only in defence rarely make interesting things.

No matter how useful, it is a lie designed to flatter the past and is built on a thick, mucous layer of platonic essentialism: the idea that these forms can exist, or that their characteristics even make sense, outside of their native environments—that abstract ideas exist somewhere pure and isolated from their context. It's a tactic for navigating around those who are stuck in the print paradigm while you try to get things done.

In addition to the basic trauma of a paradigm shift, we're watching a specific kind of evolution in action.

Now, a lot of people don't actually understand the concept of evolution. They think they do but they don't.

In their minds evolution is a hotchpotch of progress, manifest destiny, all mixed in with a strange sprinkling of Protestant-style unconditional election.

(I'm not talking to *you*. I'm talking about the other ones. The ones that brag about not understanding maths and how sciences "don't have the answers to everything" as if that excused their inability to understand basic scientific concepts. The people who work in jobs that require an understanding of digital media but, despite this being 2015 are burdened with a fuck-ton of weapons-grade ignorance on the subject. You know, the people whose attitudes to science and maths make a Texan School Board look intellectually progressive.)

Evolution. Let me explain.

Evolution isn't progress. It has absolutely nothing to do with the idea of progress. Evolution is cold and ruthless (as in Tennyson's 'nature is red in tooth and claw') precisely because it has no concept of progress or inherent good. There is only adaptation. A bacteria that is now immune to penicillin isn't inherently better than its ancestors, it's just better adapted to an environment that has been pumped full of penicillin. This may sound like progress but it isn't because adaptations are often costly and environments change, sometimes very quickly. A trait that was a superior adaptation can become a liability in the space of a single generation.

When two groups in a species start to diverge because they are, generation by generation, adapting to differing environments, what results is speciation.

That—speciation—is a word that comes a lot closer to describing what is happening in digital media than hybridisation, especially since hybridisation is merely one of the many forms that speciation can take. Hybridisation is a subset of speciation. Sometimes it fails; sometimes it doesn't.

Let's brush aside our jargon catch phrases for a moment; let's forget disruption; let's assume that the paradigm shift is behind us; and let's just focus on what is happening in the here and now.

One form of adaptation that results in speciation happens when one species is driven out of its old environment and mates with a related species that's better adapted to the new environment.

Like lately in Canada as polar bears are driven south to a warmer climate and end up forming hybrids with grizzlies and brown bears.

The ebook, as embodied by IDPF's ePub and Amazon's Mobi formats, is a hybrid, true, but an artificially bred one. It is the artificial and disastrous killer bee to the evolutionary if unsuccessful grolar bear. The ebook didn't appear organically as publishing professionals began to make digital projects filled with book-like qualities. It didn't emerge through experimentation as developers tried to infuse the values of readability and novelistic storytelling into their websites, but is instead defined by the backwards necessities of the old print environment and the thinking of the print paradigm. Instead of making websites or apps that take cues and steal ideas,

concepts, and methods from books, those who put together ebook platforms went the route of crippling web technology so that it would fit the production processes, structures, and design of an environment it will never inhabit. It is digital media constructed to fit the limited confines of the print paradigm. It is a network node removed from the network.

The evolutionary analog to current ebook formats wouldn't be the polar-grizzly hybrid but an escaped, lab-created monstrosity. The only reason why the killer bee might not be an accurate analogy is that the ebook is almost too deformed to be effectively harmful. It's toxicity is on the level of second-hand smoke and being too lazy to wash up your dishes. More than anything else, it is ineffective at anything but the plainest and simplest of texts. The ebook hybrid is about as adapted to the digital environment as a coyote with gills would be to suburban Texas.

Which wouldn't be too bad if it weren't for the fact that all ecosystems are competitive ones, even the media environment, and ebooks simply don't work as well in digital as their peers.

This is why regular ebooks fall between the cracks in this 'book' of ours. Ebooks don't have the physical manifestation of meaning of their printed counterparts nor do they demonstrate a shred of the art of the printed book. What they do manage is to suffer from most of the limitations of print combined with the instability that makes digital design difficult. Which they do without ex-

hibiting the same massive adaptability that other digital forms get in return. Ebooks have some of the readability and reader-oriented flexibility that other mediated digital forms have (e.g. feed readers, Tumblr's dashboard, Flipboard, Twitter, Instapaper) but are disconnected from the hypertext of the web and lack the dynamic, networked structure that make those apps useful. Think of the difference between a regular downloaded ebook and a Wattpad 'ebook'. The former may well have more features (though hard to implement given how compromised modern ebook platforms are for development) but the latter is immeasurably richer because it remains a part of a larger, interconnected, and social context. A book written and published on Wattpad is undeniably better adapted to the digital environment than a regular ebook, even when it's the same book that has just been republished in two different contexts and even though it has much fewer features in terms of layout or typography.

The focus here is on the less compromised digital forms, comparing contrasting them to the more embodied media like print. At least, until the publishing industry comes to its senses and realises that adapting ebooks to a print environment that no longer exists is exactly what is holding ebooks back.

Paradigms are defined through practice

We don't need a theory for disruptive innovation because paradigms are defined through practice.

> Scientists work from models acquired through education and through subsequent exposure to the literature often without quite knowing or needing to know what characteristics have given these models the status of community paradigms. And because they do so, they need no full set of rules. The coherence displayed by the research tradition in which they participate may not imply even the existence of an underlying body of rules and assumptions that additional historical or philosophical investigation might uncover. [...] Paradigms may be prior to, more binding, and more complete than any set of rules for research that could be unequivocally abstracted from them. (Thomas S. Kuhn, The Structure of Scientific Revolutions)

You'll never find the digital media worldview outlined neatly in a textbook. What you can get is a textbook presenting a series of statements and catechisms that look to believers *like* a neat and comprehensive definition of digital media. But to outsiders it will look like gobbledegook—arrant nonsense composed of random fragments

and patent delusions. This is normal. To me, texts that outline the core values of print and its associated worldview look like wishful thinking, wrapped in denial, tied with a neat bow of nostalgia. You can't teach a worldview. It can only be ingrained and defined through practice.

The only reliable way to adopt a particular worldview is to join the community of practice that defines it.

To see the world through the eyes of print you must work with print.

To see the world through digital you need to do the work and commit to the practice as it's employed by the communities that surround it. Yes, communities, plural, because there is more than one.

To answer the question "what is digital media?" you have to resist the temptation of engaging in structural analysis or of constructing intricate theories. Instead you have two options, both of which are the same tactic but from two different angles.

1. If you are interested in figuring out what digital media is to the audience, look at what the audience does.
2. If, on the other hand, you need to define it from the creator's perspective, look at what creators do when they create.

Both will vary depending on what cross-section of the practicing or experiencing community you are looking at. Good. This is a worldview, not an internally consistent mathematical model or a engine with tight tolerances.

"What is the web?" It's linking, progressive enhancement, modularity, separation of form and content, dynamic, animated, and shareable.

"What are apps?" They are tightly integrated representations of structured data. They are databases and riffs on standard User Interface elements. They are a capsule definition of a particular developer's understanding of a format or structure.

Digital media is how we make it.

Digital media is how it's enjoyed.

Our actions are what define it, not our words, statements, or catechisms.

(Note: this is why the entire discourse on 'millennials' is utter nonsense spouted by morons. The worldview schism isn't generational but practical. A millennial with a MA in Publishing who works for a traditional publisher will have a thoroughly print worldview. A sixty-five year old software developer who has been making websites and server-side software for twenty years will see things from the perspective of digital media. Everybody of a particular generation doesn't behave in the same way or have the same opinions. Try not to be stupid about this.)

The wealth of change

> When the individual scientist can take a paradigm for granted, he need no longer, in his major works, attempt to build his field anew, starting from first principles and justifying the use of each concept introduced. That can be left to the writer of textbooks. (Thomas S. Kuhn, The Structure of Scientific Revolutions)

Much as in the sciences, when you stop wasting your time defending your paradigm, when you stop having to build your field from scratch in every debate, re-presenting its history and best practices from ground up to every interlocutor, a wellspring of time and energy opens up for you to tap into.

There isn't much point in trying to talk somebody out of a firmly held belief. A person's worldview isn't up to debate. That's what we are dealing with: paradigms, worldviews, beliefs. Faith. We aren't talking about sports where, no matter what you think about the players, the winner is the winner and the loser is the loser. Debate the qualities of each team but, if they won, they won. You can't talk a person out of their perspective on the world no matter how many points you score.

Scoring points just makes people more angry.

Take it from someone who has played that game for too long: sometimes you just have to preach to the choir. Don't evangelise; the choir has heard it all already. Don't preach; the believers don't need converting.

The only constructive thing to do is to focus on the practice—the work. Try and figure out better ways to make and create. Let the work itself do the preaching and evangelising.

Stop wasting your time debating people who are never going to agree with you. The energy you free up can be spent on better things. But even if you can spare the time and energy, the risks and price of sparring with ideologues is often higher than you think.

Don't be framed!

Here's a mistake I keep making and, hopefully, by documenting it I can avoid repeating it.

Maybe you're familiar with this sequence of events:

1. A pundit or blogger writes something outrageously wrong or something that completely misrepresents something important to your profession or field of study.
2. You write a response.
3. The pundit's reply ignores what you said: they use it a springboard to make a completely different point; your words become an excuse to criticise you personally; or they misrepresent everything you said in a manner that supports their agenda.

4. Repeat steps 2. and 3. until you are furious.
5. *You* then get dismissed and branded as the irrational and angry crank who is always on the attack and responds to reasonable discussions with fury. It doesn't matter if their initial question was a defence of the indefensible, you're cast as the irrational one. *"Hitting children with planks. Some people say it's immoral. Others say that it is a necessary part of how the publishing industry works."*

Note: the provocateur pundit always *always* maintains a level of civility, tone, and politeness that's higher than the baseline of the community they are participating in. That's how they get away with writing outrageous and offensive nonsense.

This is a *no win* situation because the pundit controls the frame of the discussion. The *point* of the instigating post is to strengthen the pundit's ideological base—cement their position within the community that holds their worldview. It is very much an intentional trap and the only solution is to not fall for it.

Occasionally, especially on Twitter, you will find the pundit using a slightly different setup to this routine. The cycle isn't triggered by a post but by the pundit coming in with an innocent question—often one that's either a bit strange or out of the left-field. You answer, and before you know it, you've been pulled into a cycle of nonsense where the pundit is trying to brand you as a troll, crank, or madman in front of their chosen community, which then gets pulled in to join the attack.

No good comes from engaging with these people.

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